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ABSTRACT

In order to identify the human factors that affect the achievement of the Military Assistance Program (MAP) objectives and from them define personnel selection criteria, training objectives, and management policies, a conception of advisor proficiency and a method with which to study it were developed. Results presented in this report are based upon a questionnaire survey conducted in 1966 among U.S. Army advisor personnel assigned to the Korea Military Advisory Group (KMAG) and their counterparts in the Republic of Korea Army. A rationale for conceiving of proficient advisor counterpart transactions in terms of their stated willingness to continue working together in the future is presented. Construction of an assessment technique to obtain estimates of these intentions is described, as are the results of tests of the validity of the concept and method. (Author)

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# Military Advisors and Counterparts in Korea: 3. An Experimental Criterion of Proficiency

Dean K. Froehlich

**HUMAN RESOURCES RESEARCH ORGANIZATION**
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1. This report, the last of three dealing with research on advisor-counterpart relationships, describes an initial effort to develop an experimentally useful conception of proficient advisor-counterpart interactions, and to evaluate the validity of the approach and method used to assess them.

2. A rationale is presented for conceiving of proficient advisor-counterpart transactions in terms of their stated willingness to continue working together in the future. The procedures used to construct an assessment technique with which to obtain estimates of these intentions are described. The results of tests directed toward assessing the validity of the concept and method constitute a major portion of the report. Information was collected by means of a questionnaire distributed during the Summer and Fall of 1966 to approximately 70% of the Army personnel assigned to the Korea Military Assistance Group and functioning as advisors and to counterparts in the Republic of Korea Army.

3. This report will be of interest to those engaged in research and training on the advisory relationship in foreign countries.

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16. Abstract

In order to identify the human factors that affect the achievement of the Military Assistance Program (MAP) objectives and from them define personnel selection criteria, training objectives, and management policies, a conception of advisor proficiency and a method with which to study it were developed. Results presented in this report are based upon a questionnaire survey conducted in 1966 among U.S. Army advisor personnel assigned to the Korea Military Advisory Group (KMAG) and their counterparts in the Republic of Korea Army. A rationale for conceiving of proficient advisor-counterpart transactions in terms of their stated willingness to continue working together in the future is presented. Construction of an assessment technique to obtain estimates of these intentions is described, as are the results of tests of the validity of the concept and method.

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# FOREWORD

This report describes an initial effort to develop an experimentally useful conception of proficiency as applied to Military Assistance Program (MAP) advisors in their relationships to counterparts, and to evaluate the validity of the approach and method. Results are based upon observations collected from advisors assigned to the Korea Military Advisory Group (KMAG) and their counterparts in the Republic of Korea Army (ROKA).

This report is the third in a series resulting from efforts conducted under Work Sub-Unit MAP II, Studies of Advisor-Counterpart Interactions. Earlier reports include *Military Advisors and Counterparts in Korea: 1. Job Characteristics* (1), and *Military Advisors and Counterparts in Korea: 2. Personal Traits and Role Behaviors* (2).

The research described in this report was conducted by HumRRO Division No. 7, (Social Science), Alexandria, Virginia. The Director is Dr. Arthur J. Hoehn. Dr. Dean K. Froehlich was the Work Unit Leader. Dr. John W. McCrary conducted many of the interviews with advisors and counterparts and generally contributed to the work from planning to publication. Mr. Jerome P. Corbino assisted in the management of the data during the statistical analysis phase of the research.

Administrative and logistical support was given by the U.S. Army Research Unit, Korea whose chief, LTC Monroe D. King, coordinated the work with KMAG. Exceptional assistance was given throughout the work by Mr. Cho Hui-sok, Research Technician, U.S. Army Research Unit Korea, and Mr. Kim Chi-kyong, translator-interpreter, and Professor Kim Chong-um, formerly at the English Language Research Center, Seoul National University.

COL Carroll B. Hodges, Korea Military Assistance Group Adjutant General, served as principal point of contact during the developmental and data collection phases of the work. BG L.H. Gomes, Senior Advisor to First Republic of Korea Army, COL P.S. Reinecke, Chief of Staff, Detachment L; COL A.L. Baker, Commander, Detachment F; COL W.C. Naselroad, Chief of Staff, Detachment R; COL D. Cooper, Senior Advisor V/VI ROKA Corps, Detachment West, and COL M.F. Schroeder, Deputy Senior Advisor I/II ROKA Corps, courteously extended their hospitality and use of their facilities, and arranged for interviews with their officer advisors.

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Permission has been obtained for use of copyrighted materials included in this report.

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Meredith P. Crawford
President
Human Resources Research Organization

# SUMMARY AND CONCLUSIONS

## MILITARY PROBLEM

The Military Assistance Program (MAP) exists to promote international security by increasing the military capabilities of allied nations and by securing their support for the presence and policies of the United States. Cognizant of the importance of human factors to the achievement of these objectives, the Department of Defense and other agencies have developed or are developing various ways to ensure that MAP personnel are proficient in the role of advisor.[1] The chief components by which control over the human factors is likely to influence proficiency are (a) the selection procedures used to identify personnel best suited to the role, (b) the programs of instruction offered to prospective advisor personnel, and (c) the local Military Assistance Advisory Group's (MAAG's) personnel orientation program and management practices.

In order to identify the human factors that either facilitate or impede the achievement of MAP objectives and from them to define personnel selection criteria, training objectives, and management policies, it is first essential to develop a conception and method with which to assess advisor proficiency. Work Unit MAP II represents an initial effort to develop an experimentally useful conception of proficiency and to evaluate the validity of the approach and method.

## RESEARCH OBJECTIVES

The research undertook to (a) develop a conception of proficiency appropriate to the role of the MAP advisor, (b) construct an experimental device for collecting assessments of the proficiency of a sample of advisors and counterparts, (c) collect information concerning conditions and characteristics that might affect the level of proficiency achieved, and (d) assess the validity of the concept and the scores derived from the assessment device by testing the proficiency scores for relationships to various conditions and characteristics associated with advisor-counterpart relations.

## RESEARCH PLAN

The search for a conception of advisor proficiency was directed toward answering three nested questions: What features distinguish the military advisor role from non-advisory roles? In which of these features are personnel likely to differ in terms of level of skill and expertness they bring to it? Which of these features are amenable to control through personnel selection techniques, programs of instruction, and/or local MAAG management policies and practices?

Candidate conceptions of proficiency were evaluated in terms of these features as well as five functional specifications. Advisor-counterpart interaction proficiency was defined as the ability of advisors to manage their differences with counterparts in ways that increase the motivation of counterparts to continue working with them—that is, that appeared to have the effect of producing cohesiveness. The experimental literature concerning the relation between cohesiveness in small groups and various indices of group

[1] For example, DCSPER Study 40, Remedial Action Project 9, and the U.S. Army Five-Year Research Plan.

effectiveness and productivity supports the appropriateness of the conception of proficiency adopted for study.

The second basic element of the research plan consisted of an answer to the question: How can it be determined empirically whether the means by which this conception of proficiency is measured is a good substitute for direct observations of the actual performance of advisors and counterparts?

To answer the question, the estimates obtained from advisors and counterparts concerning their willingness to continue working together were compared with (a) their impressions of one another's personal traits, (b) a number of characteristics descriptive of how satisfactorily advisors and counterparts judged each other to be performing their roles, (c) characteristics descriptive of the types of work-related and social interactions they had had with one another and, finally, (d) a number of biographical characteristics.

This information was used as a basis for estimating the validity of the method in terms of its "construct validity" and "criterion-related validity." The statistical and literal properties of the items from which proficiency scores were derived were used as a basis for estimating the "content validity" of the scores.

## RESEARCH PROCEDURES

Questionnaires were constructed for collecting information from advisors and counterparts concerning their biographical characteristics, the nature of their work, and several characteristics descriptive of their work-related interactions. Interpersonal attraction between pairs of advisors and counterparts was measured by their rating each other with regard to 38 personal traits. Similar ratings of Americans and Koreans with whom they preferred and did not prefer to work permitted comparisons between these preferences and ratings given to specific advisors and counterparts.

Role-behavior inventories were constructed from information collected through interviews with advisors and, separately, counterparts. Items in the inventories were based upon the responses of advisors and counterparts to questions aimed at identifying the kinds of behaviors that left them with either very favorable or unfavorable impressions of one another.

Finally, a 20-item checklist was developed with items designed to assess the willingness or unwillingness of advisors and counterparts to work together. Scores derived from the checklist were interpreted as estimates of "proficient advisor-counterpart transactions" and so labeled PACT scores.

Copies of each of the several questionnaires were distributed, in the summer and fall of 1966, to approximately 70% of the Army personnel who were then assigned to the Korea Military Assistance Group and who were functioning as advisors to counterparts in the Republic of Korea Army. Advisors and counterparts each provided a number of similar as well as different types of biographical information. Advisors, and counterparts to a much more limited extent, provided information descriptive of both their work-related and social interactions. Each advisor described the personal traits of the one counterpart with whom he had been working to achieve the single set of changes that he regarded as most important. That particular counterpart then described the personal traits of his advisor by means of a translated version of the trait scales. Each described the other with regard to how satisfactorily he enacted his respective role. Finally, each answered all 20 of the items in the PACT checklist on the basis of his experiences with

and feelings about this particular advisor or counterpart. Complete data were obtained from 51 pairs of advisors and counterparts.

The reliabilities of the PACT scores advisors gave to counterparts (and vice versa) were determined. The content validity of the PACT items was estimated by means of factor analyses of the two forms. Other types of validity tests were performed to determine the ability of the PACT scores to register variations among advisors and counterparts with regard to their personal traits and preferences, evaluations of the adequacy with which they enacted their respective roles, reports of their work-related interactions, social interactions, and a number of biographical characteristics.

## FINDINGS

Major findings relating the willingness of advisors and counterparts to continue working together (PACT Scores) to other characteristics of the participants are as follows.

### Interpersonal Attraction

(1) A substantial portion of counterparts' willingness to continue working with advisors is related to how positively they rate their advisor's personality. The personal traits that appear to make the greatest difference to counterparts coalesce to form a single statistical factor. Those traits are associated with the counterparts' impressions of how *trustworthy* the person is, how *enthusiastically* he acts toward them, how *competently* he performs his job, how *harmoniously* he gets along with them, and how *thoughtful* and *sincere* he appears to be. While advisors use many of the same traits to describe their counterparts, their absolute descriptions of them are essentially unrelated to PACT Score estimates of their willingness to continue working with them (see Tables 11 and 12).

(2) Moderate relationships are observed between how well advisors and counterparts match each others' conceptions of a most-preferred co-worker who is a member of their own ethnic group. Large differences are associated with less willingness to continue working together as estimated from the PACT Scores given (see Table 13).

### Critical Role Behaviors

The willingness of advisors and counterparts to continue working together is, for both groups, related to how satisfied they are with the relatively specific ways in which their co-worker enacts his role.

(1) Advisors and counterparts are similar in that, on the average, both groups expressed satisfaction with regard to about 70% of all the role behaviors rated in the study. For both groups, the greater the percentage of role behaviors judged satisfactory the greater is their expressed willingness to continue working together.

(2) Advisors and counterparts are similar in that, on the average, both groups expressed dissatisfaction with regard to about 30% of all the role behaviors rated in the study. For both groups, the greater the percentage of role behaviors judged unsatisfactory the less is their expressed willingness to continue working together.

(3) Counterparts' dissatisfactions are variations on a dominant theme—they want more support. Counterparts want their advisors to *more often* (a) take actions to procure

materials, supplies, and equipment for them; (b) advocate their requests and recommendations in MAAG staffings; (c) support them in satisfying their superiors' requirements; (d) keep them informed on the status of requests, plans, work in progress, and so forth; (e) display an interest in becoming knowledgeable about their country's language, history, economy, customs, and the feelings of their people.

(4) Advisors' dissatisfactions appear to be, on the average, of three types. About 40% of the advisors expressed dissatisfaction with the extent to which their counterpart had kept them informed (in particular, they were dissatisfied with the contents of briefings). Second, nearly two-thirds of the advisors agreed that their counterparts should *less often* permit their subordinates to turn out work that is unnecessarily below standard or contains errors. Finally, somewhat less than one-half of the advisors view their counterparts as failing to use ordinary logic often enough when planning a course of action.[2]

### Job-Related Characteristics

The willingness of advisors and counterparts to continue working together was also observed to vary as a function of a number of characteristics descriptive of work objectives and means.

(1) The willingness of advisors to continue working with counterparts was observed to vary with the extent to which the advisor appeared personally involved in the work, the extent to which he judged his counterpart to be professionally competent, the degree of contact he had with the counterpart, the autonomy he had with regard to conducting the work, and the extent to which he was satisfied with the progress that had been made toward effecting the changes he sought.

(2) The willingness of counterparts to continue working with advisors was observed to vary with counterparts' impressions of the nature of the influence the advisor sought to exert, the counterpart's accessibility to the advisor, and his evaluation of the adequacy of the interactions that had occurred. Additionally, the willingness of counterparts to continue working with advisors appears to vary as a function of the advisor's estimate of the extent to which they were in agreement concerning the desirability of making the changes recommended by the advisor, the advisor's opinion concerning the effectiveness with which the counterpart participated in implementing the changes, and the advisor's evaluation of the counterpart's general level of military competence.

(3) Certain job-related characteristics appeared to have no effect upon the willingness of advisors and counterparts to continue working together (Table 15).

### Social Interaction Characteristics

Neither advisors' nor counterparts' willingness to continue working together appears strongly influenced by the types and frequencies of social interactions surveyed in this study. Eighty percent of the tests performed yielded results that were not statistically significant. Sheer frequency of social interactions between advisors and counterparts appears, in general, to have a somewhat weaker influence than the kinds of conditions under which they met for off-duty types of interactions. Results suggest that person-specific interactions (individual advisor vis-a-vis individual counterpart) tend to be of the type having the greatest effects.

[2] For more detailed results see appendices in the second report in the MAP II series (2).

### Biographical Characteristics

Biographical characteristics tested for relationship to the willingness of advisors and counterparts to continue working together were, in general, found to be unrelated.

## CONCLUSIONS

Results of the study could have been interpreted in three ways. First, specific findings based upon one set of observations can be related to findings based upon other sets of data. Interrelationships might, for example, be sought between the various combinations and permutations for Interpersonal Attraction Scores, Critical Role Behavior Scores, Job Characteristics, Social Interaction Characteristics, Biographical Characteristics, and PACT scores without assigning any special status to the latter. This has not been done because the conception of proficiency that was developed and tested required a research strategy designed to assess the validity of the conception and the device constructed to obtain assessments of it.

The second approach to interpreting the findings of the study is in terms of attempting to reach a conclusion concerning the validity of the concept and the method. The body of the report is a comprehensive account of the detailed procedures and results relevant to those attempts.

The third context in which the findings may be interpreted is with regard to the implications they have for operational matters pertaining to the control of efficiency by way of selection, assignment, training, orientation, and management policies and practices. Because of the experimental nature of the conception of proficiency that was developed and tested, the latter implications are subject to change and revision depending upon the extent to which current findings are replicable.

### Methodological Conclusions

The feasibility of simultaneously collecting judgments and impressions from MAP advisors and foreign counterparts concerning their own and each other's characteristics has been demonstrated. The similarities between the results of these observations indicate little difference between advisors and counterparts with regard to "courtesy biases" and other kinds of response sets intended to mask criticism. The conclusion is based upon comparison of their descriptions of one another with regard to their personal traits, their conceptions of preferred and non-preferred kinds of co-workers, and their expressions of satisfaction and dissatisfaction with regard to critical role behaviors. There is no evidence of "faking" of information on anything other than a random basis. Statistically significant relationships between information collected totally independently from advisors and counterparts counterindicates the probable importance of such factors.

The strategy adopted to evaluate the validity of the PACT method differs from the simpler and more historical approaches in that it provides more than a single validity coefficient. Given the exploratory and developmental nature of the conception of proficiency advanced, and the assumed multiplicity of antecedent conditions likely to affect it, substitution of a single numerical value in place of analyses of results based upon

multiple tests seems least likely to increase understanding of the conditions and characteristics registered by PACT scores. Validity can be ascribed to the PACT method in the sense that scores derived from it register variations:

(1) Between advisors' and counterparts' responses to 20 items that coalesce to form factors which are, in part, defined by items that explicitly ask the respondent to make a choice between continuing to work with a current advisor (or counterpart), terminating the relationship, or avoiding it in the future.

(2) Between counterparts' evaluations of their advisors' competence and character.

(3) Between counterparts' comparisons of the personal traits of their advisors to those associated with Koreans with whom they do and do not prefer to work.

(4) Between advisors' comparisons of the personal traits of their counterparts to those associated with either an American or a Korean with whom they prefer to work.

(5) Between advisors' judgments concerning the adequacy with which their counterparts currently enact their role.

(6) Between counterparts' judgments concerning the adequacy with which their advisors currently enact their role.

(7) Between advisors with regard to how personally involved they appear to be in their advisory role, the degree of contact established with the counterpart, and how satisfied they are with the progress that has been made toward accomplishing the advisors' recommended changes.

(8) Between counterparts with regard to what they perceive their advisor to be primarily concerned about in his relations to them, the counterpart's degree of contact with the advisor, and his judgment concerning the adequacy of it.

(9) Between advisors with regard to whether they have engaged in social interactions with counterparts that are of a type that occur infrequently.

(10) Between advisors who are and are not experienced in advising foreign personnel as well as those who have had and not had prior MAP assignments.

(11) Between advisors who hold the rank of major and those who do not.

(12) Between advisors whose counterparts hold the rank of lieutenant colonel and those who do not.

The failure of the PACT scores to register variations between advisors and counterparts with regard to a host of other characteristics is, by and large, a desirable feature of the method, for these characteristics may be disregarded when attempting to interpret the meaning of the scores and the kinds of inferences they will support. In sum, the PACT scores appear valid in the sense that they register variations between advisors and counterparts with regard to characteristics that can reasonably be expected to influence the extent to which the two basic objectives of the MAP are or can be met. Those characteristics and conditions not registered by PACT scores are, in general, of a type for which it is possible to concede only trivial influences, if any at all, upon the achievement of the mission.

## Operational Implications

In the absence of uniform and independent assessments of the extents to which interactions between advisors and counterparts result in the attainment of increased military capability and support for the presence and policies of U.S. personnel in Korea, it can be only argued, but not empirically demonstrated, that the relationships observed

between PACT scores and the conditions and characteristics of those interactions have implications for agencies concerned with the development, improvement, and maintenance of advisory proficiency.

### Current Level of Proficiency

Several sources of data converge to indicate that in the summer and fall of 1966 the level of cohesiveness was moderately high. Thus, the degree to which improvement is possible is limited to those cases where high PACT scores were either not given or unreciprocated. However, further study of the factors influencing PACT scores is required before this interpretation can be fully accepted. Whether the interpretation is tenable depends upon identification of factors relevant to the Program that can also account for the disparities observed.

Because PACT scores have been shown to vary as a function of a variety of conditions and characteristics of advisor-counterpart interactions, it appears unlikely that any single change in current practices and policies is likely to have strong effects upon raising the level of cohesiveness. Current practices and policies, though not directly examined in the present study, seem not inconsistent with attainment of a substantial level of cohesiveness.

On the assumption that present findings are replicable and are relevant to the achievement of MAP objectives, efforts directed toward the creation and maintenance of cohesive relations might most profitably focus attention upon the following.

### Selecting *Who* Will Interact

The willingness of counterparts to continue working with advisors appears significantly affected by both the professional competence and the personal character of their advisor. Generally, it appears counterparts seek to work with personnel who are able and motivated to serve as their personal mentors. Achievement of cohesive relations to counterparts requires personnel skilled in the prevention of potential, and management of actual, conflicts, disagreements, and differences of opinion, value, and judgment.

### Management of *What* is Interacted

To the extent permitted by other operational requirements, advisors who are granted autonomy to personally identify the changes they will recommend and upon which they will work with counterparts are most likely to express a high willingness to continue working with the counterparts upon whom they must depend for implementation of the changes. To the extent other operational requirements permit, advisors should be encouraged to undertake changes that can be accomplished during the period of their tour of duty in KMAG. Assignment of duties to advisors should consider factors that may limit their opportunities to contact counterparts with a frequency promotive of cohesiveness. Assignment of duties to advisors should be consistent with efforts to avoid giving counterparts the impression that the advisor is exclusively concerned with only monitoring their participation in the MAP.

### Training in *How* to Interact

Training and orientation programs aimed at the development of cohesiveness should focus attention upon the kinds of advisory role behaviors counterparts judge

important, contrast them to the kinds of counterpart role behaviors advisors judge important, point out the potential sources of dissatisfaction, and develop guidance with regard to managing them. Construction of training materials and methods with which to desensitize advisor personnel to those aspects of the local living conditions that may be regarded as noxious may facilitate the development of cohesiveness by better preparing them to approach and interact socially with counterparts in their milieu. Behavioral adjustments that can cope effectively with verified risks that exist within the local milieu need to be developed and taught to advisors. Advisors' awareness of and sensitivity to counterparts can be expanded by teaching them about Korean cultural behaviors and orientations of special importance to Korean people.



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# Military Advisors and Counterparts in Korea: 3. An Experimental Criterion of Proficiency

# INTRODUCTION

The Military Assistance Program (MAP) exists to promote national security by increasing the military capabilities of allied nations and by obtaining their support for the presence and policies of the United States. The success of the Program depends upon the abilities of advisors, individually and collectively, to perform their duties under conditions that are often less conducive to success than are those typical of non-advisory assignments—that is, those that exist entirely within U.S. military organizations, whether Continental United States or overseas. The special difficulties may range from relatively specific problems of health and personal security to general problems with counterparts stemming from broad cultural and linguistic differences as well as factors inherent in this type of assignment.

Cognizant of these difficulties, the Department of Defense and other agencies have added or are planning to add components designed to provide the Program with advisors proficient in coping with these conditions. The chief components (Figure 1) are: (a) the selection procedures used to identify personnel best suited to the advisory role; (b) the programs of instruction offered to prospective advisors; and (c) the local Military Assistance Advisory Group (MAAG) personnel orientation program and management practices. The success of the Program has depended upon the extents to which each of these three separate but interrelated components contribute to advisory effectiveness.

**Chief Components of the Military Assistance Program**

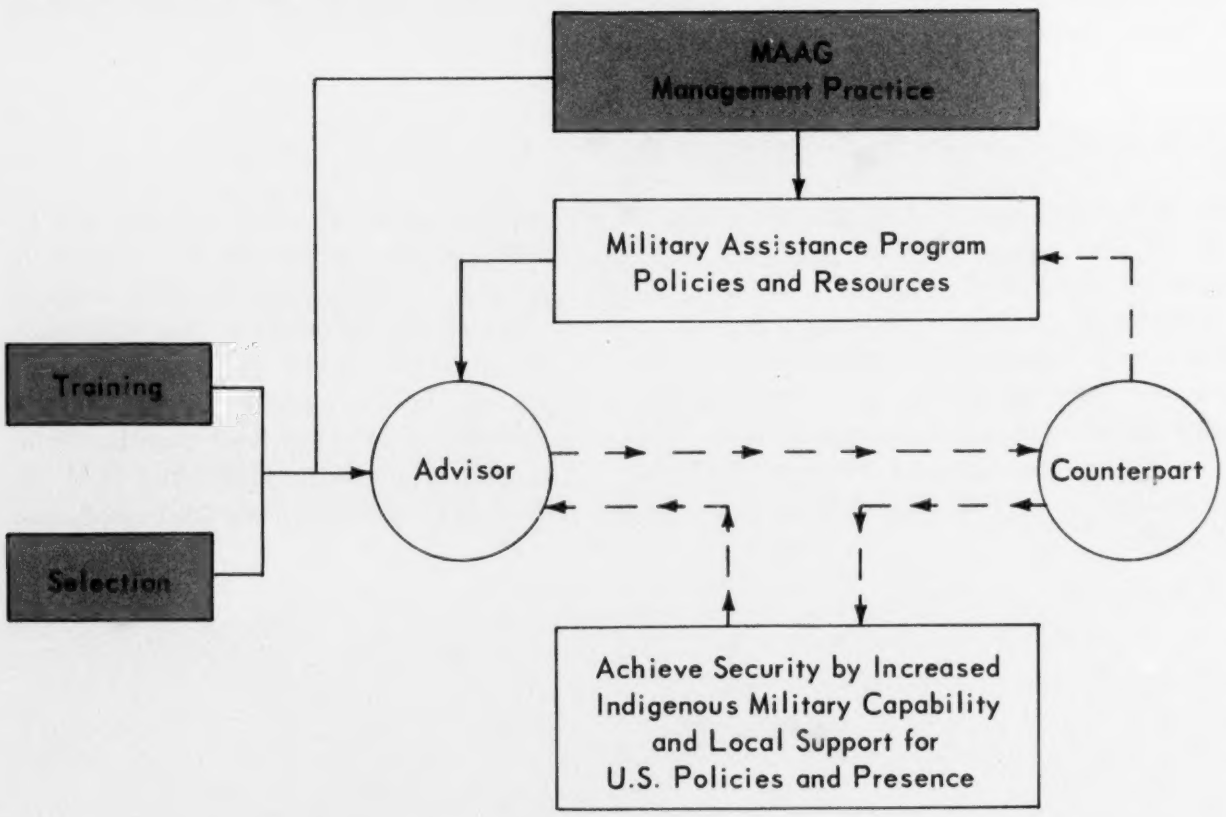


Figure 1

## MILITARY PROBLEM

Military management decisions pertaining to the control of advisors, whether by means of policies or by procedures associated with their selection, training, or orientation, are typically made to improve or ensure advisors' effectiveness. Decisions, to be effective, must result in detectable differences in the changes they seek to produce. The gradual evolution of a body of policies and procedures that promote effective advisor-counterpart interactions depends upon demonstrating relationships between the decisions and their consequences.

However, historically, the implicit choices in the decisions associated with the policies and procedures that have been applied to military advisors have not been put to this type of test. Decisions have instead been justified on the basis of logic and expert opinion, and largely guided by the informal, anecdotal, often idiosyncratic reports of experienced advisors. In contrast to other areas of military training, the programs of instruction designed to prepare personnel for advisory assignments have developed no on-the-job criteria of proficiency.

The absence of acceptable techniques for evaluating the proficiency of advisors reflects a number of circumstances, chiefly the failure to develop applicable concepts of effectiveness. Without a useful conception of proficiency as a guide in choosing between alternate policies, procedures, selection, training, and orientation programs, there is little guarantee that the best choices are being made. Nor is there any way to demonstrate that the intents of the choices have been realized, or to make observable discriminations between what is important and what is unimportant, what is simply interesting and what is essential, what *might* facilitate or impede effective interactions and what actually does. Indeed, without a clearly defined conception of proficiency and a technique for assessing it, estimates of the level of effectiveness at which an advisory group currently operates are unlikely to allow the discovery of the conditions that led to that level. Knowledge of what these conditions are is essential to any effort designed to improve the effectiveness of the advisory program.

## RESEARCH OBJECTIVES

This study was conducted to (a) develop a conception of proficiency appropriate to the MAP advisor's role, (b) construct an experimentally useful instrument for collecting assessments of the proficiency of a sample of advisors and counterparts in their current roles, (c) develop methods for collecting information descriptive of various characteristics of advisors and counterparts that might influence the proficiency of their interactions, and (d) assess the conception and estimate the validity of the instrument by testing the proficiency scores for relationships to various characteristics of advisors and counterparts.

This study is the third in a series of efforts conducted under Work Sub-Unit MAP II. Previous studies were concerned with job characteristics (1), and personal traits and role behaviors (2).

# RESEARCH PLAN

## DEVELOPMENT OF A CONCEPTION OF ADVISOR PROFICIENCY

The choice of a conception of advisor proficiency was strongly influenced by the nature of the purposes for which it was sought. Basically, the concept was needed in order to establish a foundation for the construction of observational techniques for comparing advisors and/or counterparts. The selection of a characteristic against which to

### MAP Components Concerned With Information on Advisor-Counterpart Performance

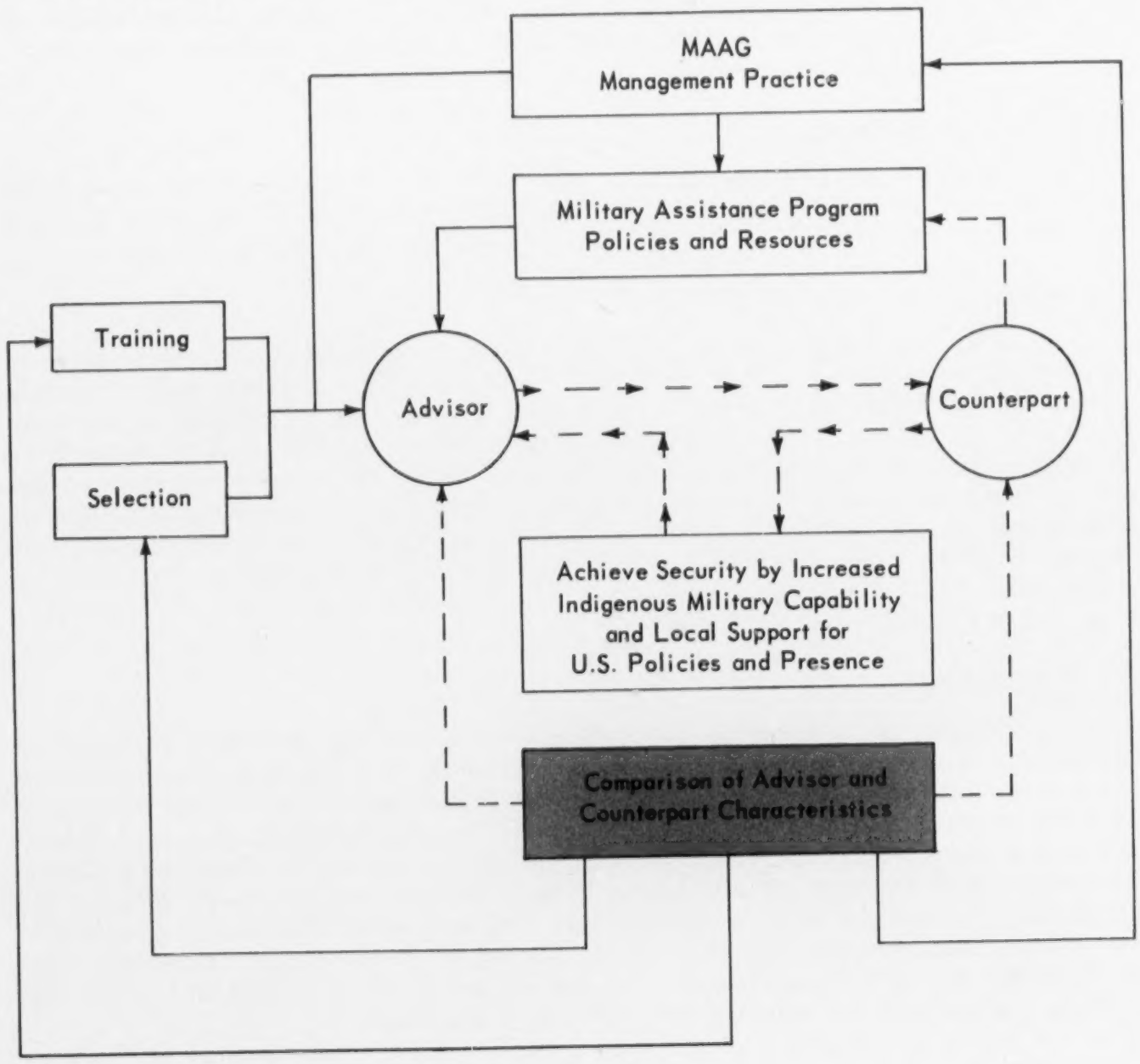


Figure 2

compare personnel was importantly influenced by judgments about how useful the comparisons were likely to be to agencies concerned with improving advisor performance through the development of personnel selection procedures, training programs, or personnel management practices (see Figure 2). In short, the search for a conception of advisor proficiency reduces to finding answers to a set of three nested questions:

What features distinguish the military advisor role from non-advisory roles?

In which of these features are personnel likely to differ in terms of level of skill and expertness?

Which of these skills are amenable to control through personnel selection techniques, programs of instruction, and/or local MAAG personnel management policies and practices?

In the effort to select a maximally useful conception of proficiency, candidates were evaluated with regard to three classes of factors. The concept was to be selected because (a) it, more than others, was judged to serve five essential functions; (b) it, more than others, was judged to be appropriate to the cardinal characteristics of the advisor's job role; (c) it could easily be related to and interpreted within an extensive body of research results and a theory of leadership effectiveness derived from them. The conception of advisor proficiency selected, developed, and tested in this study therefore represents an amalgamation of objectives, requirements, and considerations.

## Functional Specifications

To maximize the potential value of the conclusions that were to be drawn from comparisons of the proficiency of advisors and/or counterparts, it was judged essential that whatever conception of proficiency was used meet the following specifications.

### Relevant

First, the assessments of proficiency were to be based upon characteristics of advisors and/or counterparts that could have consequences for achieving basic objectives of the Military Assistance Program. In this sense, the conception of proficiency was to be *relevant* to the nature of the mission. Thus, consideration was given only to conceptions that might have some relationship to the extent to which the military capability of the advised forces was strengthened, and indigenous support for the presence and policies of U.S. personnel was increased. "Unit readiness" was regarded as highly relevant, but because it is also a function of many other variables that would obscure *demonstrating* relationships between advisor-counterpart interactions and achievement of MAP objectives, it had to be rejected.

### Transactional

Second, the conception of proficiency adopted was to reflect *outcomes of interactions* between advisors and counterparts. The need for this specification arises from the nature of the three types of controls that can be exercised to increase the proficiency of advisors. Personnel selection techniques, programs of instruction, and local MAAG orientation and advisor management practices all seek to promote proficiency by altering the *actions* and *reactions* of advisors to local conditions and personnel. Thus, if the research results were to apply to agencies and personnel responsible for these aspects of the Military Assistance Program, the criterion for assessing advisors and counterparts must be reducible to, or at least relatable to, the nature of the acts they did or did not perform and the personal traits expressed in their interactions.

Again, a conception of proficiency based entirely upon measures of "military preparedness" or annual training test scores of advised units was eliminated because estimates of unit readiness reflect numerous factors over which individual advisors and

counterparts seldom have control. Such measures reflect much more than the specific behaviors and personal traits of advisors and counterparts and the outcomes of their interactions.

Equitable

Third, the search was restricted to conceptions of proficiency that seemed capable of providing *equitable* assessments. Attention was to be directed only to outcomes for which it could be assumed that advisors had sufficient control that assessments of their performance would be fair and accurate. Here again, a conception of proficiency based upon unit readiness or improvements in readiness would, most likely, yield invidious comparisons between personnel. A conception based on the number or rate of successful changes introduced into the advised forces seemed also to run the risk of leading to intrinsically unfair comparisons between personnel.

Informative

Fourth, but also related to the second specification, was the need to develop a conception of proficiency that promised to yield insights into the conditions—personal and situational—that tend to either promote or impede proficiency in the advisory role. In this sense, the search was restricted to conceptions that promised to be *productive* of information.

Feasible

Finally, candidate conceptions of proficiency were eliminated if there was reason to believe that it was not *feasible* to devise means for collecting reasonably accurate and reliable observations of instances of proficiency.

Among the candidate conceptions dismissed for failure to satisfy this specification was assessment in terms of money. Because the activities of nearly all advisors have dollar consequences, at first glance money might appear to be the universal denominator of proficiency. The more sophisticated concept of cost-effectiveness, while useful in the analysis of other types of activities, does not seem feasible here. While it is relevant to assessing advisory performance, and likely to represent the outcomes of interactions between advisors and counterparts and to produce insights into the personal and situational factors influencing it, a pilot study limited to logistics advisors indicated that few could accurately estimate the cost-effectiveness of their actions. Moreover, while cost-effectiveness can easily be related to increments in the military capability of the indigenous forces, there is little reason to believe (and some reason to disbelieve) that it is related—either directly or indirectly—to increments in the support counterparts give to the presence and policies of U.S. personnel.

## Appropriateness of Concept to Characteristics of Advisory Job

The preceding five general specifications do not exhaust all features that are to be desired in a conception of advisor proficiency. The additional problem remains of attempting to isolate, from among the myriad characteristics of advisors and counterparts, a particular feature that both satisfies the preceding five specifications (especially relevance to the basic MAP objectives) and is appropriate to the cardinal characteristics of the advisory role or job.

A portion of the MAP II research sought to delineate the military advisor's role in terms of various characteristics of the work performed (1). Conclusions drawn provide an

empirical basis for distinguishing advisory from non-advisory roles. Among the cardinal characteristics identified were the following:

Advisory objectives are heterogeneous. Data collected from advisors to the Armies of the Republic of China and of Korea indicated that advisors differ significantly in the ends they seek. Any attempt to define advisor proficiency must, at the outset, take cognizance of this feature. Therefore, a conception based on comparisons between advisors with regard to the changes they seek to make will yield only invidious comparisons. While advisors surely will succeed in inducing changes, the variation due to differences in the nature of the changes sought makes this conception of proficiency extremely difficult to operationalize.

Advisory obstacles are heterogeneous. Data collected indicated that advisors differ significantly with regard to the nature of the circumstances that tend to impede progress toward effecting the changes they seek. The implications of this fact for defining advisor proficiency are essentially the same as those described above. Variation between advisors in the inherent differences in the obstacles they face makes comparisons on the skill and expertness displayed in overcoming obstacles a doubtful approach to conceiving a workable definition of proficiency.

Advisors depend upon counterparts. Evidence collected indicated that, in a majority of cases, attainment of advisory objectives depended heavily upon the motivation, cooperation, and abilities of counterparts to participate in making changes. Advisors to the Republic of Korea Army credit counterparts with the accomplishment of about 50% of the work related to effecting the changes they sought. These advisors also ascribed to counterparts responsibility for many of the obstacles encountered which, on the average, retarded accomplishment of the changes for periods of three or more months. The interdependence of advisors and counterparts is further evidenced by the frequency with which, on the average, they meet to conduct their work. Thus, one of the cardinal characteristics of the advisory role is the high degree of interdependence that exists; depending upon whether the relationship is a cooperative one, it may facilitate or impede achievement of advisory objectives.

This aspect of the advisory role is common and hence warranted consideration as a possible area of advisor performance requiring skill and expertness. Whether the interdependence evolves toward a positively synergistic relation or toward irreconcilable antagonism may reflect differences between advisors in personal skills as well as situational factors. Because of the likely individual variation in expertness and its probable consequences on attainment of advisory objectives, the search for a conception of proficiency becomes more limited in scope.

Association with counterparts is a long-term matter. The most important changes that advisors seek to make require time extending over large portions of the normal tour of duty as advisor. Not uncommonly, the nature of the conditions which advisors seek to change involves disagreements between them and their counterparts. Thus, one of the cardinal characteristics of the advisory role is the ability to manage the disagreements in ways that do not lead to a complete rupture of association with the counterpart, while simultaneously persisting toward achieving the changes sought. It is in the nature of the advisory role that attention to these two aspects of the job must be sustained over long periods of time. While this is perhaps not a feature that distinguishes the advisory role from nonadvisory assignments, personnel may be expected to differ in the expertness of their performance. Additionally, there is reason to believe that the general level of expertness displayed can be controlled by means of personnel selection techniques, programs of instruction, and local MAAG orientation programs and management practices.

Conventional authority is limited. A feature of the advisory role that has consequences for the attainment of MAP objectives is the fact that advisors normally have command type responsibilities *without* command authority. Advisors and counterparts, while interdependent, are members of different military organizations and usually are not subject to a commonly recognized power capable of regulating disagreements between them.

Because of the existence of two power structures rather than one, the work of initiating, supporting, implementing, and evaluating changes tends to differ from the work associated with non-advisory assignments where a single chain of command authority exists. Moreover, the existence of the second power structure, which reflects sometimes divergent cultural and national interests, and whose informal modes of operation are different and initially unknown to the advisor, tends to make the advisory role ambiguous. Because of the uncertainties generated by these circumstances, the advisor needs information from counterparts that cannot be obtained through exercise of command authority. It may be assumed that prospective advisory personnel vary in their abilities to adapt to the conditions of limited command authority and to develop alternate and compensatory means of achieving their objectives.

Compensatory interpersonal influence is needed. Restricted in their power to control counterparts and events through the social conventions and prerogatives normally included under the concept of command authority, some advisors tend to open up new channels of influence. Despite the fact that advisors are usually one or two ranks below counterparts, the degree to which the relationship remains highly formalized and impersonal tends (at least in Korea) to diminish, perhaps more than would relationships between American officers equally different in rank. Many advisors tend to personalize the formal military relationship by not limiting their attention to the immediate and specific requirements of the military problems upon which they must work together. To compensate for the lack of command authority, the advisor must develop the relationship with his counterpart so that the advisor's part is as consonant with the general welfare and needs of the counterpart as regulations, policies, and personal preferences allow. This type of relationship can lead to an increased flow of information, a diminution in the ambiguities of the assignment, better understanding of what is important to counterparts, less resistance to recommendations, and possibly less defensive kinds of interactions.

Advisors who succeed in establishing relations to counterparts that promote their willingness to continue working with advisors are—especially in view of their different cultural backgrounds, languages, standards of living, and personal, organizational, and national interests—demonstrating a type of skill that is important to the attainment of MAP objectives.

Advisees are experts. Counterparts are, by virtue of their greater experience within the host country, more knowledgeable than advisors with regard to a wide range of factors against which advisors' recommendations may be judged. Counterparts can use their expertness either to promote or to frustrate the efforts of advisors depending, in part, upon the extent to which the advisor recognizes their expertise.

Unusual opportunities are available. Advisory assignments offer opportunities to experience a variety of satisfactions not usually associated with assignments in the United States. Counterparts may actively guide, encourage, and promote the advisor's explorations of his culture and country or exploit his ignorance of it; they may participate with the advisor in recreational activities or reject invitations. They can affect the advisor's sense of fulfillment of his curiosity about the world as much as they can his sense of having fulfilled his duties to the advisory role.

While each of the preceding eight statements is generally characteristic of the advisor role, the development of a conception of proficiency requires sorting them into those that (a) tend to distinguish between advisor and non-advisor roles, (b) isolate features of

the advisor role that simultaneously affect the achievement of MAP objectives and reflect individual differences between personnel in skills, especially those that (c) are amenable to control by the use of personnel selection procedures, programs of instruction, and local MAAG management practices. Those features of the advisory role that fulfill these requirements constitute a definition of proficiency.

In recapitulating the eight points it can be said that:

(1) Advisors probably do not differ greatly from non-advisors in the variety of changes, taken as a group, they seek to accomplish. An exception is that advisors might seek a greater number of changes that involve the attitudes, motives, and values of personnel upon whom the work depends.

(2) Advisors probably do not differ greatly from non-advisors with regard to the variety of obstacles they, as a group, encounter. An exception is the possibly greater number of obstacles confronting advisors than non-advisors, arising from the fact that advisors and counterparts less often agree on what will be done, or when, how, and how well it will be done.[1]

(3) Attainment of basic MAP objectives depends heavily upon the willingness and ability of counterparts and advisors to reconcile differences, negotiate agreements, and work cooperatively over substantial periods of time.

(4) Advisors must have the skills required to persist in effecting the changes they deem essential while at the same time avoiding alienating counterparts who may not fully agree with their judgments.

(5) While differences of opinion, judgment, and value that occur between members of the same military organization are subject to reconciliation through the exercise of a higher command authority, the advisory role differs greatly in this regard. More often than non-advisors, advisors must be their own mediators and negotiators of resolutions and agreements.

(6) Advisors' success in contributing to the MAP objectives depends upon their ability to recognize ways to personally promote their counterparts' welfare; without that, counterparts are unlikely to communicate freely and provide advisors the information they need to reduce the ambiguity of their role and to plan knowledgeable courses of action.

Thus, the role of the MAP advisor requires, to a greater extent than other military roles, a high level of skill in managing differences between himself and his counterparts. While advisors often cannot ignore differences between what they and counterparts regard as important or necessary without jeopardizing MAP objectives, they cannot compel agreements by exercise of command authority. Yet, they cannot simply insist upon the rightness of their own views and the wrongness of their counterparts without the risk of alienating the person whose cooperation is essential to achieving MAP objectives.

Thus, the fundamental feature of the advisor role is proficiency *in managing differences, either actual or potential, in ways that do not diminish, but rather increase, the motivation of counterparts to continue communicating to and working with them.* In short, proficient advisors are those who are successful in establishing *cohesive* relations to counterparts. If counterparts seek to terminate and can successfully avoid contact with advisors, advisors simply cannot perform the functions of their role, and cease being advisors. If the particular changes being sought were of enough importance that they must be made even though a counterpart will not participate, the advisor begins to function in a role that is incompatible with the basic objectives of the MAP.

[1] **The comparisons between advisors and non-advisors with respect to these features are conjectural—no data bearing on these points exist.**

Thus, the conception of proficiency that is most relevant to the advisory role, is transactional in nature, and is likely to yield equitable comparisons between advisors promises to provide comparisons between both personal and situational factors that influence the establishment of cohesive relations, and thus the obtaining of information concerning possible ways of controlling them. The concept must be such that it is feasible to develop observational procedures for collecting and recording instances of proficiency. Fundamentally, proficiency is defined in terms of the willingness of advisors and counterparts to continue working together in the future.

### Cohesiveness and Effectiveness

Examination of the cardinal characteristics of the advisor role shows the appropriateness of defining proficiency in terms of the extent to which cohesive relations are formed. Further justification for this conception of proficiency is to be found by reviewing the kinds of conditions that influence the formation of cohesive relations, and the effects that appear associated with cohesion. To the extent that these conditions and effects are important to the MAP advisor role, they are properly included in any conception and measure of proficiency.

McGrath and Altman (3), in their survey of the social-psychological literature concerning interpersonal relations in work groups, regard the following statements as veridical and representative of the findings from numerous studies:

> Interpersonal attraction among members of a group seems to be consistently and positively associated with, and perhaps derived from, member perceptions of their own and each others' status, power and attitudes.
>
> To pursue this question further, it appears that *mutuality* of perceptions, with respect to the situation or task and not each other, is associated with member attraction to one another and to the group. People are attracted to those who they think like them, who they think have the same task orientations as they do, who they are told like them (via any of a host of induced congeniality manipulations), who they are told to cooperate with rather than compete with, and so forth. (pp. 60-61)[2]

Thus the conditions that facilitate or inhibit the development of interpersonally attractive (cohesive) relations are intrinsic to the advisor-counterpart type of relationship and, because of different cultural backgrounds, not automatically likely to be mutually shared. The adjustments, adaptations, accommodations, and working out of a *modus operandi* required to achieve mutuality are likely to involve cognitive and behavioral skills of interest to those seeking to develop proficiency. Some readers may, at this point, acknowledge the relationships between cohesiveness and the antecedent conditions just described. Many may also acknowledge that these factors are intrinsic to advisor-counterpart relations. Some will, however, still question the appropriateness of a definition of proficiency in terms of cohesiveness. They will ask: What are the consequences of developing or not developing cohesive relations to counterparts? What differences can be expected?

McGrath and Altman (3) provide a summary answer to a similar question when they state:

> One of the results of high member attraction toward one another or toward the group is an increased communication rate. People communicate with those they like, and in doing so *they show less aggressiveness and defensiveness*, fewer communication difficulties, and more attentiveness to others. [Italics added.] Furthermore, positive interpersonal relations in the group are associated with

[2] J.E. McGrath and I. Altman. *Small Group Research: A Synthesis and Critique of the Field*, Holt, Rinehart and Winston, Inc., New York, 1966 (3). This and the following quotation reprinted with permission of the publisher.

> member perceptions that other members and the group as a whole are performing well on the task. Thus, at this juncture, the picture indicates that group members are attracted to others who are in desired positions or who have desired skills, and these favored persons likewise are attracted to the group; that individuals like those who like them, are attracted to cooperative conditions, and see congenial groups and their members as doing well on their jobs.
>
> Unfortunately, the sequence ends at this point. *The relationship between interpersonal attraction per se and performance is quite unclear.* Although there have been few direct tests of this relationship, what data do exist suggest an equivocal relationship. High member congeniality, cooperativeness, mutuality of liking, and other similar indicators of high cohesion do not appear to bear a universally positive relationship to performance.

Despite the fact that McGrath and Altman felt compelled, on the basis of their review of experimental results, to conclude that ". . . indicators of high cohesion do not appear to bear a universally positive relationship to performance," their conclusion should not be misconstrued to mean that a positive relationship cannot be expected from the kinds of conditions under which advisors and counterparts interact. One of the singularly important contributions of Fiedler (4) and his associates is their ability to conceptualize the kinds of conditions under which one might or might not expect to find a positive relationship between a measure of cohesion and measures of performance.

The basic assumption of Fiedler's theory of leadership effectiveness is that it depends upon the leader's style of relating to, and the extent to which he can control, those who perform the work, and the nature of the work. Each of these dependencies is equally characteristic of advisor-counterpart relations and thus the relevance of leadership role theory to the development of a conception of advisor proficiency. Often, two different styles of leadership orientation are distinguished. Observers have generally summarized the differences between the two styles in the following kinds of terms:

> These clusters have been variously labeled as autocratic, authoritarian, task-oriented, and initiating on the one hand versus democratic, equalitarian, permissive, group-oriented, and considerate on the other. The leader can either take the responsibility for making decisions and for directing the group members ("I make the plans and you carry them out") or he can, to a greater or lesser extent, share the decision-making and coordinating functions with the members of his group. He can use the proverbial stick or the equally proverbial carrot for motivating his members.
>
> One of these is leadership style which is primarily task-oriented, which satisfies the leader's need to gain satisfaction from performing the task. The other is primarily oriented toward attaining a position of prominence and toward achieving good interpersonal relations. In terms of promoting group performance, our data show that the task-oriented type of leadership style is more effective in group situations which are either very favorable for the leader or which are very unfavorable for the leader. The relationship-oriented leadership style is more effective in situations which are intermediate in favorableness. Favorableness of the situation is here defined as the degree to which the situation enables the leader to exert influence over his group (4, p. 13).[3]

Estimates of the power associated with the leader's position relative to the work group are obtained by means of a checklist of 18 items (see Appendix A). Items range over behaviors such as worker's reactions to compliments from the leader, his authority to recommend punishments and rewards, and worker's respect for his opinions, to his abilities to complete the task being performed by the work group. When the MAP advisor role is scored against the items in this checklist, it becomes apparent that advisors have considerably less than maximum power. The leadership situation is much less favorable to them than it is, for example, for their colleague who is commanding a U.S. unit where leadership powers are greater.

[3] F.E. Fiedler. *A Theory of Leadership Effectiveness,* McGraw-Hill Book Company, New York, 1967, (4). Reprinted with the permission of the publisher.

In the absence of norms against which to compare advisor groups in terms of their power, precise comparisons are not possible. Yet, given the apparently large difference between the probable degree of power possessed by advisors and the theoretically possible maximum, it is possible to speculate on what this difference means and to draw some tentative conclusions about the nature of the advisory role.

In contrast to leaders in positions of great power, leaders with little power have a difficult job exerting the influence that is needed to obtain the performance they seek. Indeed, their power may largely be spent attempting to establish themselves in a position of continued influence over the workers. With the possible exception of advisors whom counterparts clearly regard as controlling the flow of funds, supplies, equipment, and materiel, advisors tend to occupy positions of relatively little power.

Punishment, in the form of administering noxious conditions, almost never exists in the advisor's armamentarium. At most, punishment is a means of exerting influence over counterparts only in the form of withholding or withdrawing conditions desired by counterparts. The rewards available for advisors to use are also different from, and perhaps less potent than, those customarily used by unit leaders within the U.S. military. While it is conceivable that advisors can use the second form of reward, withdrawal of noxious conditions, the underlying assumption of "friendship between allied nations" with jealously guarded sovereign rights makes the initial application of noxious conditions to counterparts unacceptable unless done indirectly in disguised and highly rationalized form.

In sum, advisors, by virtue of the commodities they can grant, withhold, or withdraw from counterparts, have some means by which to exert influence over their counterparts' performance. By virtue of their membership in a different organizational power structure, they (except by invention) have few institutionalized forms of reward and punishment with which to exert influence over counterparts. The limited amount of power available to advisors would tend to suggest, given Fiedler's general findings concerning the most effective style of leadership for that condition, that advisors adopt a task-oriented style when relating to counterparts. Other considerations, when examined, temper that conclusion to an important degree.

Among the factors considered by Fiedler to dictate which style of leadership will be most effective is the extent to which the tasks that are to be performed are structured or unstructured. Task structure is defined, following the approach of Shaw and Blum (5), in terms of four characteristics of the work: (a) the extent to which decisions are verifiable; (b) the degree to which the work objectives are clearly understood by the workers; (c) the different ways in which it is possible to achieve the same objectives; (d) the number of different solutions that can all be regarded as correct in some sense. Where no (or few) choices exist with regard to each of these four task characteristics, the task is highly structured. Conversely, where there are many choices the task is highly unstructured.

In general, at higher levels of military organization the tasks become less and less structured. This is relevant when assessing the style of leadership most likely to be effective in the advisor-counterpart type of relationship, because advisors typically find themselves attempting to assist higher-ranking counterparts whose military positions involve duties that are even less well structured than those the advisor has coped with in the past.

Second, advisors and counterparts, because of their heterocultural backgrounds, tend to interact or coact under conditions of greater ambiguity than typically exist in interactions with members of their own military organization and culture. They differ from each other in language, modes of thought, customs, values, and personal as well as national interests. These differences inflate the number of choices that are likely to be considered when attempting to define task objectives, identify the most suitable means,

evaluate the solutions, and verify the wisdom of the choices selected. Whereas a U.S. unit commander can often safely ignore differences between himself and his work force by realistically assuming a high degree of agreement, advisors cannot, without serious consequences, ignore the many more significant differences that exist between them and their counterparts. A large part of the work of an advisor consists of achieving agreements with counterparts that reduce the ambiguity of their relationship and that create task structures where none initially existed.

Finally, in the absence of a strong, commonly accepted command authority and in the presence of conflicts of interests, needs, and priorities between advisors and counterparts, agreements are most susceptible to influence by judicious use of *quid pro quos.*[4] In a sense, the world of the advisor and counterpart is based upon a barter type of economy. The items of exchange may range from such intangibles as giving favored attention to the personal preferences of counterparts to such tangibles as the host government agreeing to participate in a particular military operation in support of a U.S. policy in return for increased funds, supplies, equipment, and so forth.

Because advisors and counterparts are not directly subject to the control of a single organization, cooperation between them tends to be more voluntary and less compelled than it is between them and other members of their own organizations. What induces cooperation is the optional granting or withholding of services and resources that gives to these exchanges the status of being "favors." Knowing what has to be given in order to get what is wanted and reaching an accurate estimate of the value a counterpart places upon the favor requires a degree of familiarity with the counterpart that is hardly ever a consideration within U.S. military organizations. The acquisition of the required information depends upon establishment of relations to counterparts that are marked by more attentiveness to the preferences of the individual, less defensiveness, less aggressiveness, and better communication. These characteristics are usually those associated with what is termed "cohesiveness."

If the preceding examination of the relationship between advisors and counterparts is accurate and representative, then the choice of leadership style most likely to be effective in the advisor role is somewhat easier to estimate. A need for the considerate, interpersonal orientation toward counterparts is suggested by the unstructured nature of advisory tasks, the heterocultural backgrounds against which advisors and counterparts interact, and the necessity to reconcile differences and reach mutually acceptable agreements. The relatively unfavorable position of advisors, with respect to their control over counterparts, suggests a more task-oriented style could be more effective. Thus, the analyses of the advisor role and its relationship to counterparts lead to the conclusion that a style of leadership that emphasizes either of the two extremes will probably be less effective than one that utilizes both approaches, depending upon circumstances. Evidence supportive of this conclusion was obtained by Nayar, Touzard, and Summers (8) who report that under conditions of negotiation between American and Indian students, mediators who were moderate in their orientation were judged to have been more effective than those who manifested more extreme styles.

On the other hand, Mitchell and Foa (9) report evidence that indicates that American ROTC Special Forces students who took an interpersonal orientation toward the job of leading a group of Asian (mostly Thai) students in the accomplishment of a simulated construction job were more effective than leaders who were primarily task

[4] An historical and factually detailed account of the need to adopt a *quid pro quo* policy in military advisory operations appears in *United States Army in World War II, China-India-Burma Theater, Stilwell's Command Problems* (6) and, in the companion volume, *Time Runs Out in CBI* (7), by C.F. Romanus and R. Sunderland.

oriented. In addition to completing the job in significantly less time, the interpersonally oriented leaders were judged to have made significantly fewer cultural errors (actions offensive to Thais) than the task-oriented leaders who had also received special training in the ways of the Thai culture. Unfortunately, the American students were pre-selected in order to eliminate all who were neither extremely task- or person-oriented leaders, so it is not possible to compare the results of this study to that of Nayar, *et al.* (8).

What appears to emerge from these and other studies is the general impression that Americans who reflect consideration for those people upon whom they depend for work are more likely to accomplish the work than those who reflect concern only with the work. Since limited evidence suggests that Americans with a mixed style of leadership might, under some circumstances, succeed in leading their co-workers to higher levels of performance, the firmest conclusion would seem to be that Americans who are predominantly task-oriented toward counterparts will be least likely to accomplish their mission.

Thus, the experimental literature suggests the appropriateness of conceiving advisor proficiency in terms of the cohesiveness that is achieved. Perhaps the clearest test of cohesiveness is to determine the extent to which people who are currently working together wish to continue or discontinue working together. These then were the factors considered in deciding how to determine and measure proficiency when applied to the role of the MAP advisor.

What remained to be decided were answers to two basic questions: What principles and strategy could most likely be converted into a set of procedures for constructing an instrument capable of registering variations in the proficiency with which advisors achieved cohesive relations to counterparts? And what strategy would permit assessments of the validity of the concept of proficiency and the instrument with which it was being measured?

## VALIDATION OF THE CONCEPT AND MEASURE OF ADVISOR PROFICIENCY

The fundamental aim of the proficiency concept adopted in this study was to suggest a means for comparing individuals on a type of performance judged relevant to attaining two basic objectives of the MAP. For reasons given previously, it was not the aim to make direct measurements of the degree to which individuals accomplished those specific objectives. The fact that an intermediate conception of proficiency is being used, one for which it has not been possible to establish direct relations to measurable characteristics of the ultimate conceptions, requires that the validation of the immediate conception be accomplished indirectly (see Figure 3).

The validity of the conception of proficiency that was adopted for experimental study has been argued on the grounds that it was the most feasible one to use, given the characteristics of the advisor-counterpart type of relationship and results based upon the laboratory work of others. This section is addressed to the question: How can it be determined empirically whether the means by which this conception of proficiency is measured is a good substitute for direct observations of the actual performance of advisors and counterparts?

The general strategy consisted of a search for relationships between characteristics of individual advisors and counterparts (who, how, what) and their positions with regard to estimates of proficiency (see Figure 3). Relationships were then examined and patterns sought that could be judged for consistency with attainment of the Program's objectives. Several different tactics were used to make the comparisons needed for an overall estimate of the validity of the concept and the assessment device.

One estimate of the device validity was made by reference to its *contents*. Validity, in this sense, depends upon determining the extent to which responses to the items are

**Kinds of Interactions With MAP Management**

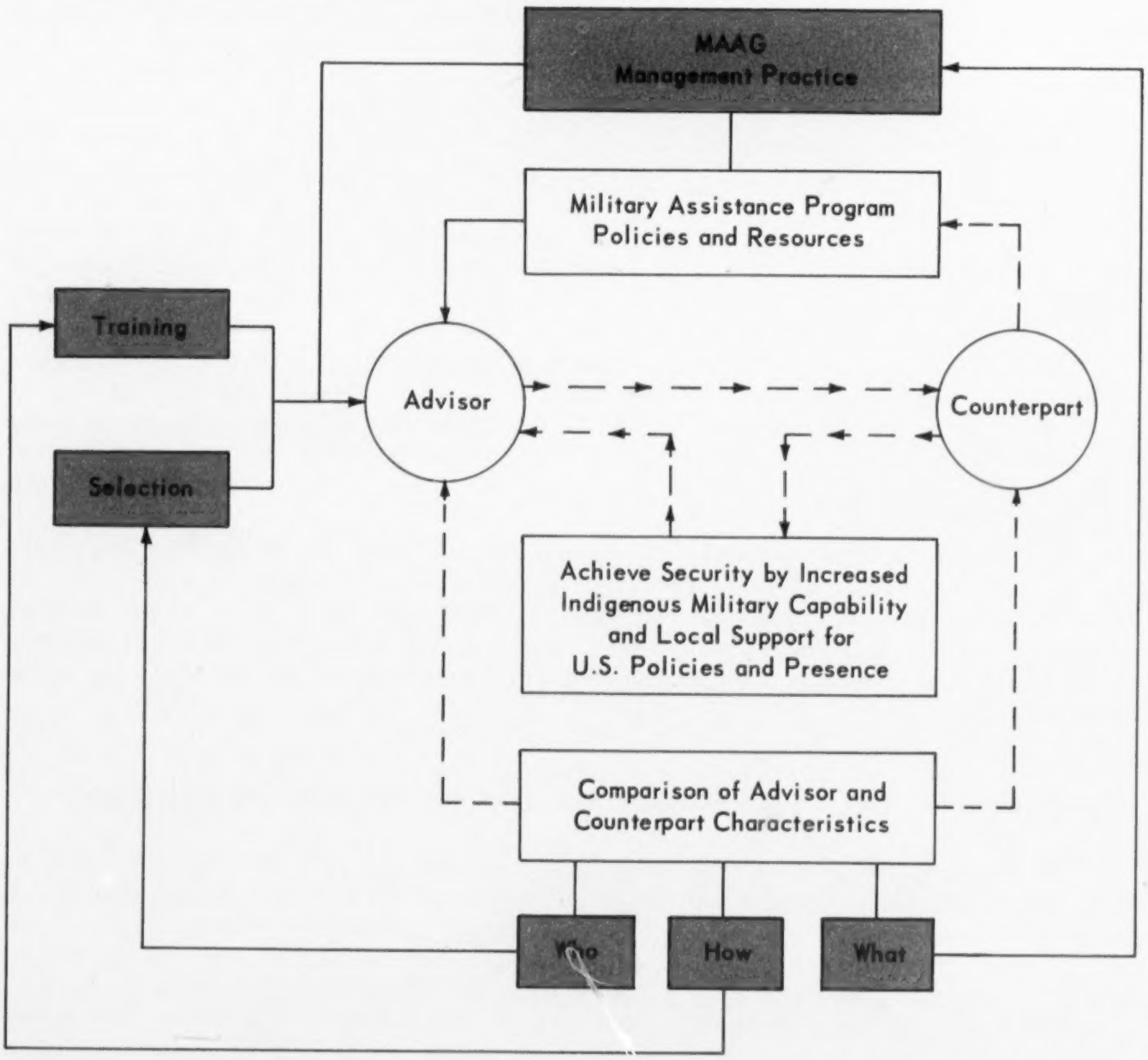


Figure 3

representative of, or are believed to be related to, those acts that are of ultimate concern. Thus, an effort was made to construct, pretest, and select for inclusion items likely to discriminate between people who did and did not wish to continue working together. The items finally selected to form the proficiency measure, therefore, constitute an operational definition of the extent to which advisors establish cohesive relations to counterparts and vice versa. The observance of responses to the items in the checklist is a substitute for observing what advisors and counterparts would do if they were in reality offered an opportunity to choose between continuing to work together or terminating the relationship.

Estimates of the validity of the measurement tool were also obtained by determining whether empirical relationships existed where logical relationships were expected. These basic operations define the *construct validity* of the device. Estimates of the validity with which the assessments were measuring cohesiveness were made by testing whether the

proficiency scores were significantly related to two variables that seemed to be antecedent conditions likely to influence the development of cohesive advisor-counterpart relations.

Two basic categories of antecedent conditions were examined. First, the personal traits of advisors and counterparts were examined to determine whether they related to the estimates of proficiency that were collected ("Who" in Figure 3). Second, information concerning "How" advisors and counterparts enacted their respective roles was collected (Figure 3). Data collection techniques suitable to recording advisors' and counterparts' judgments about the possible influence of these conditions on the development of cohesiveness were constructed, administered, scored, and tested for relationships to scores derived from the measure of proficiency.

These particular characteristics of advisors and counterparts were, additionally, chosen for inclusion in the study because, even if they were found to be unrelated to the experimental conception of proficiency, the information could still have valuable implications for the selection, training, and management of advisors.

Validity tests of a third type were made by determining what relationships existed between the proficiency scores and reports concerning a number of characteristics more directly related to the work activities of advisors and counterparts ("What" in Figure 3). To the extent that it seems reasonable to view as valid reports from advisors and counterparts concerning the kinds of work-related activities they engaged in, these tests for relationships to proficiency scores may be regarded as yielding estimates of the *criterion-related validity* of the device. Because of the exploratory nature of the study and the desirability of wide sampling of the perceptions and judgments of advisors and counterparts concerning various aspects of their participation in the MAP, specific hypotheses were not constructed prior to the collection, testing, or interpretation of these results.

For the most part, the information used to estimate the criterion validity of the proficiency scores was selected on the assumption that it would help to reach a decision on how much those scores tended to vary as a function of how different advisors and counterparts conducted their work and social relations.

Additionally, types of information were collected from advisors and counterparts for which there were no indications of relationship to the proficiency scores. Such information serves the function—depending upon whether it is related to the scores—of helping to define the kinds of variables that may influence judgments of proficiency. Just as it is desirable to attempt to determine the conditions that affect development of cohesive relations, so too there is value in attempting to discern those factors that do not affect them. These can then be dismissed in any effort to systematically increase the proficiency of advisors. The information that was collected to serve this function is essentially of a biographical nature.

Given the exploratory character of the study and the inability to gain a high level of control over the phenomena being studied, the strategy of collecting multiple types of data and drawing an overall conclusion on the basis of multiple tests seemed best suited to the conditions of the work. The approach is consonant with the methodological dictum that "The most persuasive evidence comes through a triangulation of measurement processes" (10) and the elaboration on it to the effect that "If a proposition can survive the onslaught of a series of imperfect measures, with all their irrelevant error, confidence should be placed on it, [for] once a proposition has been confirmed by two or more independent measurement processes, the uncertainty of its interpretation is greatly reduced."

## RESEARCH PROCEDURES

Translation of the plan into procedures with which to collect data relevant to the concepts invoked and with which to test the propositions began with the development of several data collection techniques.

### DEVELOPMENT OF THE DATA COLLECTION TECHNIQUES

The major focus of attention in this section is upon the specific details of the several steps in the development of the technique by which estimates of advisor-counterpart proficiency were obtained.

#### Measuring Job Characteristics and Counterpart Participation

The purpose of the Advisors' Task Objectives Questionnaire (ATOQ) was to give advisors an opportunity to record certain characteristics of themselves and the work in which they were engaged. That information was needed to determine which, if any, biographical characteristics and work features might appear to influence estimates of proficiency. An earlier version of this questionnaire had been administered to a sample who, in 1965, were serving as advisors to counterparts in the Republic of China Army.[5]

The items making up the ATOQ[6] covered three general types of content. Biographical information concerning the advisor's age, rank, time in present assignment, previous advisory assignments and so forth were collected. Job information, especially the most important change that he had sought to effect through a particular counterpart and the kinds of obstacles he had encountered, was collected. These items included time taken to effect the change, the effects of the obstacles on accomplishment of the changes, the advisor's judgment about who held certain responsibilities and estimates of time spent with the counterpart. Information concerning the advisor's perception of the counterpart's participation in the work defined the third content area, and included the advisor's judgment about the proportion of the work done by the counterpart to accomplish the changes, the counterpart's qualifications to participate in the work, and his effectiveness.

The format of the ATOQ consisted largely of multiple-choice items with instructions to the advisor to select the most appropriate alternative. However, in order to stimulate his thinking about the most important change that he had sought to make, the obstacles that he had encountered, and the characteristics of the principal counterpart with whom and through whom he was working, he was first asked to write a statement describing the changes and obstacles. He then used a prepared classification system to code the information he had recorded.

Scoring of the ATOQ was done on a single item basis; no total score was computed. Most of the items were scored to provide an estimate of central tendency. Means, medians, and frequency distributions were most often used, although a number of

[5] For presentation of those results the reader is referred to HumRRO TR 65-5 (11).

[6] The present report uses selected portions of the data obtained from the ATOQ for analytical purposes. For a normative description of advisors who completed the ATOQ on the basis of their work in Korea, see the first report in the MAP series, HumRRO TR 69-15 (1).

inferential statistical tests were performed to make comparisons between information obtained from two items. Thus, the information collected by means of the ATOQ was primarily intended to establish a normative description of the work-related characteristics of the advisory role. ATOQ information used in this report is analyzed only to determine what characteristics of the work may appear related to proficiency.

### Measuring Interpersonal Attraction

The purpose of the co-worker personal trait preference ratings was to obtain measures of interpersonal attraction and to identify similarities and differences between advisors and counterparts with regard to the personal traits they used to discriminate between co-workers with whom they did or did not prefer to work. Those comparisons are described and the results presented in the second report of the MAP II series (2). The immediate relevance of measures of interpersonal attraction to assessing the validity of the experimental device with which to obtain assessments of proficiency has been described in the section outlining the research plan. The present report uses both currently interacting advisors' and counterparts' descriptions of one another on the trait scales and those descriptions relative to their conceptions of most- and least-preferred co-workers. Tests are performed to determine whether proficiency scores are related to variations in these characteristics.

This data collection device consists of 40 pairs of bipolar adjectives that are descriptive of persons. A majority of the pairs selected for inclusion in the device were obtained through administration to a pilot sample of advisors and counterparts of a set of incomplete sentences. Advisors received incomplete sentences in which a "counterpart" was the subject to be qualified by completing the sentence. Counterparts received sentences requiring them to add qualifiers to the concept of "an advisor." From the total pool of qualifiers thus collected, those that occurred most often were selected; some traits occurring less frequently were included to expand the range of characteristics covered. The final list of pairs of traits was augmented by means of selecting trait pairs commonly used in studies of interpersonal perception as conducted and reported by other researchers.

The format used to collect descriptions of the personal traits of co-workers is the one commonly used by Osgood *et al.* (12). It consists of a seven-point scale, each end of which is defined by one member of the bipolar set of adjectives. The respondent indicates the extent to which the person being rated displays the trait by varying the location along the scale where he places an X.

Each advisor selected the one counterpart with whom and through whom he worked to accomplish the most important change he sought to make, and described him in terms of the 40 trait scales. Each counterpart who had been described was, in turn, requested to describe that advisor in terms of the 40 trait scales that had been translated into Korean. Additionally, each advisor and counterpart described by means of the scales persons whom they had known who fell into each of the following four categories: "most-preferred American," "most-preferred Korean," "least-preferred American," and "least-preferred Korean."

Comparisons were made between the mean individual trait scale ratings advisors and counterparts assigned to each other and to the four types of co-worker concepts. Comparisons were also drawn between the factor analytic dimensions that emerged from the ratings of advisors and counterparts. Those results appear in the second report in the MAP II series (2). The present study is limited to testing these data for relationships to the proficiency scores collected.

## Measuring Critical Role Behaviors

The purpose of the Critical Role Behaviors Inventories was to identify specific behaviors, normally occurring while performing advisor and counterpart duties, that were judged by advisors and/or counterparts to be critically important to the fulfillment of their respective roles. Information obtained by means of the inventories is analyzed in this report to determine whether variations in fulfillment of advisors' and counterparts' conceptions of each other's roles appears to influence scores from the experimental measure of proficiency.

Two behavioral inventories were constructed. One, the Counterpart Behavioral Inventory (CBI), consists of 67 items descriptive of behaviors of counterparts observed and reported by advisors. The other, the Advisor Behavioral Inventory (ABI), consists of 124 behaviors of advisors observed and reported by counterparts. These descriptions were obtained through interviews with advisors and counterparts in which each was asked: "Please think back over the experiences with your present KMAG advisor [or present counterpart] and let me ask you some questions about them. First, try to recall a time when you felt that your present advisor [counterpart] behaved in a way which you thought was highly commendable. Try to remember the circumstances under which it happened and explain what it was about the advisor [counterpart] that impressed you so favorably."

After this question had been answered, a parallel question was asked which differed from the first only in that "*un*favorable impression" was substituted for "favorable impression" and "commendable." Statements illustrative of the contents of the inventories are:

> My advisor has nonconcurred with ROKA plans and requests.
>
> My advisor has tried to find out what I or my superior needed and then has done his best to obtain whatever was needed.
>
> My counterpart has failed to inform me of conditions about which I expected to be informed.
>
> My counterpart has voluntarily taken actions that go beyond routine procedures, when those have proven inadequate, in order to accomplish his mission.

From the entire pool of statements, redundant descriptions were eliminated and the remainder put into inventory format. The format required advisors to compare the behavior of a particular counterpart (the one with and through whom they had been working to effect the changes they sought) to those behaviors described in the inventory and to indicate (a) how often the counterpart behaved as described in the item, (b) how often the advisor thought this behavior should occur, and (c) how important he thought the behavior to be. Counterparts then made the comparison for the specific advisor who had previously described them. Comparisons were made by means of the 124 descriptions of behaviors that appeared in the inventory of advisor behaviors, with the same three judgments made about each item.

Scores from individual item tabulations are described and discussed in the second report in the MAP II (2) series. For the purpose of this report a different scoring procedure was adopted to determine relationships between advisors' and counterparts' judgments concerning the adequacy of each other's role enactments and their estimates of overall proficiency.

Total scores, based upon all responses to all items in the respective inventories, were computed for each advisor and each counterpart. Individual responses to each item were compared to determine whether the rater was indicating that the person being judged should, in his opinion, display the kind of behavior described by the item more often or less often, or need make no change. The frequency with which each of these three

outcomes occurred for each rater was then converted to percentage of total items completed. The percentage of "no change" responses is interpreted as an estimate of the rater's satisfaction with his advisor's or counterpart's role performance, while "more often" and "less often" are interpreted as estimates of dissatisfaction.

### Measuring Proficiency: An Experimental Measure of Cohesiveness

The purpose of the data collection device described here was to obtain observations intended to satisfy the aims set forth in the earlier section on the development of a rationale for an approach to assessing the proficiency with which advisors and counterparts interacted. Essentially this required the construction of a technique with which to obtain responses from advisors and counterparts that would permit identifying and quantifying individual differences between them with regard to their willingness to continue to work together. Ease of administration and scoring recommended the use of a paper-and-pencil format. Two forms were constructed, one for advisors' reactions to counterparts and the other for counterparts' reactions to advisors. The scores obtained from the device were referred to as an estimate of Proficient Advisor-Counterpart Transactions, and called "PACT" scores. (PACT forms are presented in Appendix B.)

#### Development of Item Content

The basic strategy in developing the PACT was to conceive of situations in which an advisor (or counterpart) could make a choice that would have implications for the continuance or termination of their relationship. Three specifications served to discriminate between item contents that might or might not accomplish this aim:

First, it was desirable that the items represent a sampling of the types of situations that advisors and counterparts would consider it reasonable to expect in advisor and counterpart roles. Thus, one item states, "If I met my present counterpart's superior officer, I would find it difficult to say anything good about my counterpart." To the extent that this specification was achieved, the PACT scores should be interpreted as reflecting reactions to a relatively specific set of situations, a specific individual, and not generalized beyond them.

Second, the item content was limited to declarative statements descriptive of ways in which an advisor (or counterpart) would react to the situation. Respondents were forced, by means of dichotomous response alternatives provided (agree-disagree), to make a choice. By controlling the content of the items, whether reflecting a favorable or unfavorable predisposition toward the counterpart (or advisor in the counterpart form), a basis is formed from which to make inferences concerning the willingness of advisors and counterparts to continue working together.

Third, an attempt was made to write items that sampled a range of expressions of approval and disapproval from which inferences concerning their willingness to work together could be made. Illustrative of a possibly mild degree of disapproval is the item, "I have met some counterparts with whom I would much more prefer to work than my present counterpart," while a stronger expression of disapproval might be illustrated by the item, "I will feel very relieved if my present counterpart is transferred to a position to which I will not serve as his advisor." By varying the levels of approval stated in the items, it was hoped to detect more differences between individual advisors and counterparts and thereby increase the variance to be related to the scores derived from the measures of role performance, trait preferences, and work-related characteristics.

Additionally, it was judged desirable to anticipate and attempt to control, through counterbalancing, the effects of possible response sets. Thus, an original pool of items was written to include statements of willingness and of unwillingness to continue working together. Second, the response alternatives (agree-disagree) were systematically

varied so that agreements with items did not invariably imply a willingness nor disagreement always imply a lack of willingness. The objective of the counterbalancing was to minimize the possible contribution of response sets to the total scores computed. To achieve a maximum total score, respondents had to endorse the negatively phrased items with disagreements and the affirmatively phrased items with agreements. The opposite relations would be required to earn a minimum score.

### Pre-Testing and Selection of Items

A pool of 40 candidate items, suitable for administration to advisors, were written and, with adjustments to make them appropriate for administration to counterparts, translated into Korean. Samples of approximately 30 advisors and 30 ROKA personnel who had had experience with advisors were administered the respective PACT forms with instructions to mentally identify either an advisor, in the case of counterparts, or a counterpart, in the case of advisors, with whom they either liked or disliked working. They then were requested to respond to each of the 40 items on the basis of how they would have reacted to that person with regard to the choices demanded by the items. For each item, a two-by-two contingency table was set up and the power of the item to discriminate significantly between the liked and disliked co-workers tested by means of Fisher's Exact Test. Items failing to discriminate at the 5% level of significance were rejected and, from the remainder, 20 items were selected that appeared to best satisfy the specifications.

## DATA SOURCE

Copies of each of the several questionnaire materials were distributed, in the summer and fall of 1966, to approximately 70% of the Army personnel assigned to the Korea Military Assistance Group (KMAG) who were functioning as advisors to counterparts in the Republic of Korea Army.

### Operational Context

KMAG is a major subordinate command of the Eighth United States Army, and its organization parallels that of the Republic of Korea Army (ROKA). The Chief of Staff and principal personnel within ROKA headquarters are advised by the Chief, KMAG, and his general and special staffs. By means of permanent detachments, KMAG's advisory functions are extended to include the headquarters and elements subordinate to both the First and Second Republic of Korea armies.

The mission of KMAG personnel is to advise and instruct ROKA on operations, tactical and technical training, supply, organization, and administration; advise the Chief of Staff, ROKA, on matters pertaining to programing and budgeting for U.S. military aid on the ROKA local currency budget; supervise the receipt, storage, distribution, maintenance, evacuation, and salvage of materiel and equipment delivered to ROKA under the Military Assistance Program; verify within capability proper utilization of military aid furnished by the United States to ROKA in the form of supplies, materials, and equipment; program for material to be furnished ROKA through the MAP, and maintain necessary records; advise the Commanding General, Eighth U.S. Army, and Chief of Staff, ROKA, and subordinate elements directly under the operational control of Eighth U.S. Army Headquarters, in matters affecting implementation of orders and directives of the Commanding General, Eighth U.S. Army and in matters pertaining to operational responsibilities for which the Commanding General, Eighth U.S. Army, is charged.[7]

[7] A more detailed description of the organization of KMAG and its relationship to ROKA may be found in *Country Study: Republic of Korea* (13).

## Selection of the Samples

An initial sample of advisors was chosen by selecting every third name in the roster of KMAG officer personnel. Because of an unexpected high rate of early reassignments, plus the normal turnover of personnel and departures from the Command, a second sample was chosen by commencing at a different point in the roster and proceeding through it.

The selection of counterparts for inclusion in the survey was accomplished by means of information supplied by advisors. They were requested, as part of their completion of the ATOQ, to identify the name, rank, position, and address of the one counterpart with whom and through whom they had worked in an effort to accomplish the single most important set of changes sought through advisory means. Because of the dispatch of ROKA forces to South Vietnam during this period an unexpected attrition in the sample occurred. Unlike the results described in earlier reports, where some questions of interest could be answered on the basis of information provided by unpaired samples of advisors and counterparts, the present report is limited to the analysis and discussion of observations collected from 51 identifiable *pairs* of advisors and counterparts. Thus, the size of the samples of observations upon which this report is based is approximately one-half of those upon which earlier reports were based.

In all cases, directives and command letters accompanied the questionnaire materials which were delivered from and returned to the U.S. Army Research Unit, Korea, by means of the Military Advisory Group postal system and the ROKA Army Message Center. Participants in the study, both advisors and counterparts, were assured in writing that their personal identity would not be associated with any public record of the results.

## Biographical Characteristics

The samples of advisors and counterparts who provided the information are compared with respect to age and rank in Table 1. Advisors and counterparts proved to be quite similar in age distribution. The average advisor was 41 years old, his counterpart 38, at the time of the study. The average advisor held the rank of Major, the average counterpart the rank of Colonel.

Table 1

**Age and Rank of Advisors and Counterparts**

| Characteristics | Advisors $N = 51$ | | Counterparts $N = 51$ | |
|---|---|---|---|---|
| | Mean | SD | Mean | SD |
| Age | 41 | 8 | 38 | 4 |
| Rank | MAJ | COL<br>CPT | COL | MG<br>CPT |

Fifty percent of the advisors reported having completed 13 or more months of their present tour with KMAG (Table 2). For a majority of the advisors their present tour in Korea was their first assignment that involved advising foreign military personnel. Only 10% of the advisors reported having had one or more previous MAP advisory assignments. About 20% of the respondents indicated that they had had duties that included advising foreign military personnel, but these assignments were not implementations of the Military Assistance Program. For advisors who did report having had previous assignments

Table 2

**Military Assistance Program Experience Indicators**

| Experience Indicators | Advisors | | Counterparts | |
|---|---|---|---|---|
| | Mean | SD | Mean | SD |
| Months in KMAG (Current tour)[a] | 13 | 7 | | |
| Months spent with foreign nationals[b] | 31 | 27 | 34[c] | 33 |
| Duty time advising[d] | 70% | 23 | 10%[e] | 9 |
| Reporting prior MAP experience[f] | 10% | | | |
| Reporting prior non-MAP advisory experience[g] | 20% | | | |
| Total number previous advisors[h] | | | 11 | 10 |

Questionnaire Scource:

[a]ATOQ 7a ($N$ = 51)
[b]ATOQ 10 ($N$ = 15)
[c]ABI-V-10 ($N$ = 46)
[d]ATOQ 6a ($N$ = 50)
[e]ABI-V-5b ($N$ = 40)
[f]ATOQ 8 ($N$ = 50)
[g]ATOQ 9 ($N$ = 51)
[h]ABI-V-11 ($N$ = 45)

that involved advising foreign nationals, their estimates of their total length of experience averaged about 31 months.

In contrast, all of the counterparts reported having had American advisors assigned to them, with the average counterpart reporting having worked with about 11 different advisors in the past for an average of about 34 months (Table 2). In addition, a majority of the counterparts who participated in the study reported having been to the United States (most of them to attend school) where they remained, on the average, for about 10 months (Table 3). Advisors reported spending an average of about 70% of their time on MAP matters (Table 2). In contrast, none of the counterparts reported spending more than 50% of their time meeting with KMAG advisors. Counterparts, on the average, reported spending about 8% of their duty time on MAP-related activities.

Table 3

**Time Spent by Counterparts in the United States**

| Question | $N$ | Percent | | Question | $N$ | Months | |
|---|---|---|---|---|---|---|---|
| | | Yes | No | | | Mean | SD |
| Have you ever spent any time in the United States? (ABI-V-6) | 47 | 87 | 13 | Number of months spent in the United States. (ABI-V-7) | 41 | 10 | 7 |
| Have you ever studied at an American military or civilian school in the United States? (ABI-V-8) | 41 | 88 | 12 | How many months did you attend school in the United States? (ABI-V-9) | 40 | 12 | 16 |

## STATISTICAL TREATMENT OF THE DATA

Answers to two basic kinds of questions were obtained by application of a variety of statistical techniques to the data. The first set of questions concerned the reliability of the PACT scores obtained from advisors and counterparts. Since the specifications followed in the construction of PACT items and the pilot testing conducted to select items were directed toward achieving a homogeneous measure of cohesiveness, the reliabilities of the advisor and counterpart forms were computed by means of Hoyt's estimate of internal consistency as obtained from analysis of variance (14).

Once it was determined that the PACT scores were highly reliable, the reliabilities of the other sources of data were not tested. Thus, to the extent that significant relationships between these other data and the PACT scores were found, a basis for assuming a significant degree of reliability for the remaining measures was established. Where significant relationships between PACT scores and the other instruments did not materialize, the absence of relationship cannot be interpreted because of the possibility it is due to a lack of reliability in the second set of scores.

The second general set of questions were all concerned with attempts to achieve an overall estimate of the validity of the PACT scores. The several types of validity previously outlined were estimated by means of several statistical techniques. The content validity of the PACT scores was judged by separately factor analyzing the intercorrelations between the 20 items within each PACT form. Individual's factor scores were computed and correlated with their total PACT scores to identify those factors contributing most to the total scores. The construct validity of the PACT scores was tested by factor analyzing the Interpersonal Attraction scores, computing factor scores and correlating them with total PACT scores. Separate factor analyses were performed on data obtained from advisors and counterparts and the pair of factor solutions compared by means of the formula for measuring the degree of factorial similarity (15). Correlations between individual trait scales and the PACT scores are also reported.

Construct validity was also tested by means of computing product-moment correlations between individual total PACT scores and the three subtotal scores, previously described, based upon advisors' and counterparts' expressions of satisfaction concerning the ways in which the respective roles had been enacted. Finally, criterion validity was estimated by means of numerous tests of the significance of differences between mean PACT scores that resulted when the PACT scores were classified according to known differences between advisors and counterparts concerning various characteristics of their work objectives and interaction characteristics.

Criterion validity, as used here, is estimated by determining the capacity of the PACT scores to reflect differences between advisors and counterparts with respect to job characteristics thought to be related to the achievement of one or both of the basic objectives of the MAP. Unlike the validity estimates based upon predictions from consideration of relationships between cohesiveness, interpersonal attraction, and critical role behaviors, the estimates of criterion validity are more in the nature of a search for possible relations than a test of predicted relations.

# RESULTS

## RELIABILITY OF PACT SCORES

Frequency distributions of the PACT scores given by the paired samples of advisors and counterparts are shown in Table 4. Each distribution is highly skewed toward maximum scores, although the distribution of counterpart scores is much less skewed

Table 4

**PACT Score Frequency Distributions[a]**

| PACT Score | Paired Samples | | | |
|---|---|---|---|---|
| | Advisors ($N = 51$) | | Counterparts ($N = 51$) | |
| | *f* | Percent | *f* | Percent |
| 20 | 25 | 49 | 14 | 27 |
| 19 | 10 | 20 | 6 | 12 |
| 18 | 4 | 8 | 9 | 18 |
| 17 | 3 | 6 | 9 | 18 |
| 16 | 2 | 4 | 4 | 8 |
| 15 | 0 | | 0 | |
| 14 | 0 | | 0 | |
| 13 | 1 | 2 | 1 | 2 |
| 12 | 1 | 2 | 1 | 2 |
| 11 | 0 | | 0 | |
| 10 | 1 | 2 | 1 | 2 |
| 9 | 0 | | 0 | |
| 8 | 0 | | 1 | 2 |
| 7 | 0 | | 0 | |
| 6 | 2 | 4 | 0 | |
| 5 | 0 | | 1 | 2 |
| 4 | 0 | | 0 | |
| 3 | 1 | 2 | 1 | 2 |
| 2 | 0 | | 2 | 4 |
| 1 | 1 | 2 | 0 | |
| 0 | 0 | | 1 | 2 |
| Mean | 17.5 | | 16.2 | |
| Standard Deviation | 3.9 | | 5.3 | |

[a]Frequency distributions of PACT scores given by all respondents (paired plus unpaired samples are located in Appendix C).

than those given by advisors. Consequently, the average advisor scores (means and medians) are higher than those obtained from counterparts. Since advisors and counterparts received different items it is inappropriate to conclude, solely on the basis of these distributions, that they expressed different degrees of cohesiveness.

The present distributions suggest that, in its present stage of development and form, the measure tends only to separate the very highly cohesive from the very non-cohesive, with the former apparently outnumbering the latter to a great extent. A possible inference from the appearance of a small percentage of extremely low scores from both advisors and counterparts is that some members of both groups are sufficiently dissatisfied with each other that the opportunity to record those feelings was taken despite possible conflict with cultural values, imagined risks, and repercussions.

These characteristics of the distributons of PACT scores, especially the relatively small proportion of low scores, should be considered when attempting to interpret the comparisons and tests made throughout the remainder of the report.

Before attempting to interpret the meaning of the PACT scores, it is essential to estimate their reliabilities. Analysis of variance estimates, based upon the small samples of only the paired groups, are shown in Tables 5 and 6. Both tests yield high and nearly identical coefficients indicative of substantial internal consistency of the items. Thus, where subsequent tests of the validity of the PACT scores fail to yield significant relationships, the failures cannot be ascribed to lack of reliability inherent to the PACT

Table 5

**Reliability of PACT Scores Counterparts Gave to Advisors**

| Source | *df* | MS | *F* |
|---|---|---|---|
| Between Subjects | 50 | 1.38 | 18.24 |
| Between Items | 19 | .77 | 10.16 |
| Residual | 950 | .08 | |
| Total | 1019 | | |
| Reliability = .95 | | | |

Table 6

**Reliability of PACT Scores Advisors Gave to Counterparts**

| Source | *df* | MS | *F* |
|---|---|---|---|
| Between Subjects | 50 | 1.04 | 19.64 |
| Between Items | 19 | .36 | 6.74 |
| Residual | 950 | .05 | |
| Total | 1019 | | |
| Reliability = .95 | | | |

scores. Whether the two coefficients can be interpreted as representing equal degrees of similarity between the contents of the two forms of the PACT is a question that the present test does not answer; that assessment requires a different statistical procedure.

## RECIPROCATION OF PACT SCORES

Given the very high reliabilities of the PACT score distributions, it becomes meaningful to inquire and determine the extent to which advisors and counterparts reciprocate, by means of those scores, similar or different degrees of willingness to continue working together. That is, do the PACT scores reflect only potential adhesiveness or actual cohesiveness?

Examination of the scatterplot based upon the 51 points defined by absolute PACT score values pairs of advisors and counterparts gave to one another indicates that *reciprocation* occurs in about 65% of the cases observed.[8] Fifty-nine percent of the advisors who gave PACT scores above the mean of their distribution in turn received from counterparts PACT scores above the mean of their distribution. Six percent of the advisors who gave PACT scores below the mean of their distribution in turn received from counterparts PACT scores below the mean of their distribution. The remaining 35% of the cases were not reciprocated, when reciprocation is defined in terms of pairs of PACT scores both being above or below the mean score for the respective distributions. Almost identical results are obtained when the median, rather than the mean, is used as a cutting point. About 20% of the advisors gave above-average PACT scores to their counterparts, but received below-average PACT scores from them. About 15% of the counterparts gave above-average PACT scores to their advisors, but received below-average scores from them. The degree to which high scores given were not reciprocated is, therefore, quite similar between advisors and counterparts. Thus, nearly two-thirds of the cases studied indicate that the PACT method does roughly measure cohesiveness, while the remaining one-third indicate that it measures only a unilateral potential for cohesiveness.

Because Work Unit MAP II was a first effort to develop an experimentally useful conception of and method with which to assess proficiency, tests designed to isolate the factors contributing to or against reciprocation were not performed. Instead, attention was directed toward estimating the ways in which the PACT scores were or were not valid indicators of the willingness of advisors and counterparts to continue working together, and the probable relations of the scores to the ultimate objectives of the MAP. However, as a by-product of these tests certain results were obtained that suggest some of the factors that may influence the extent to which PACT scores are reciprocated. These leads are primarily useful as a basis for designing studies aimed at pinpointing the conditions and characteristics that do and do not affect the degree of reciprocation achieved.

[8] A natural gap occurs in both distributions at the interval defined by scores of 14 and 15. If reciprocation is defined in terms of pairs of scores being above or below this gap, then the estimate of reciprocation changes. Specifically, the percentage of high PACT scores reciprocated increases to about 72%, while the percentage of low scores reciprocated decreases to about 4%. Necessarily, the percentage of advisors giving high PACT scores, but receiving low ones, declines to about 14%. Correspondingly, the percentage of counterparts giving high PACT scores, but receiving low ones, shrinks to about 10%. It seems reasonable to regard this definition of reciprocation as yielding an upper estimate and that defined in terms of the mean or median of the distributions as yielding a lower and more conservative estimate.

## PACT SCORE VALIDITY

This section of the report commences the attempt to appraise the extent to which the PACT scores can be regarded as estimates of the willingness of advisors and counterparts to continue working together. The PACT items are first examined and compared to assess the similarity of their contents and formal structural characteristics. Following a characterization of the properties of the PACT scores, tests related to determining the construct and criterion-related validity of the scores are described.

### Content Validity

Two basic questions are relevant to reaching a judgment concerning the content validity of the PACT scores. First, to what extent do the contents of the items appear to sample variations in the decision to continue working together and, second, to what extent are the PACT scores given by advisors to counterparts similar to those given by counterparts to advisors?

Since the first question can be answered, in part, by subjectively comparing the items to previously presented information about the advisor and counterpart roles and the conditions under which they occur, the reader may appraise this aspect of the item contents for himself. However, wider agreement with regard to a conclusion concerning the content validity of the PACT scores is more likely to be achieved if based upon more objectively performed comparisons.

The pretest procedure used to select items for inclusion in the final PACT forms resulted in only 14 of the 20 items being mere translations of each other. Thus 30% of the items in the two forms differ in literal characteristics. Whether these literal differences introduced fundamentally different contents will be examined. Second, variation does exist between the two forms with regard to the formal or structural properties of the items. The counterparts' form, compared to the advisors' contained a larger proportion (11 vs. 8) of affirmative items to which an "agree" response contributed to a larger total score. Consequently, because both forms contained the same number of items, the advisor form contained a greater proportion of negatively phrased items to which a "disagreement" response was required to contribute to a larger total score. Thus if, because of their different backgrounds, counterparts are more acquiescent than American advisors they should have tended, on the average, to give more favorable responses to advisors than vice versa. The distributions of scores (Table 7) tend not to support this interpretation. The differences tend more to support the opposite conclusion, assuming that each item contributes equally to the total score. The assumption is testable and the results that are later described indicate that these variations have relatively minor influence upon the total scores.

While the method by which PACT items were constructed and selected was designed to achieve high internal consistency of content, statistical tests were subsequently performed to assess the extent to which this was accomplished. The tests consisted of computing intercorrelations (phi coefficients) between the 20 items within each form, separately factor analyzing the two matrices by means of the Principal Axes Method followed by rotation of the Varimax criterion, and computing individual factor scores. The extent to which total scores derived from the two PACT forms were reflecting similar or different factors was estimated by computing the correlation between total scores with factor scores. The number of rotated factors extracted from the advisor and counterpart forms together with the correlation between each and PACT factor scores are presented in Table 7. (See Appendix D for complete rotated factor loading matrices.)

Before discussing the results presented in Table 7 the unrotated factor matrix will be examined for assistance in reaching a conclusion with regard to the homogeneity of the

Table 7

**Content Validity Estimates: Correlations Between Total PACT Scores and Factor Scores**

| Advisors ($N = 51$) | | | | | Counterparts ($N = 51$) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Factor | Unrotated Variance (percent) | Rotated Variance (percent) | $r^a$ | $r^2$ (percent) | Factor | Unrotated Variance (percent) | Rotated Variance (percent) | $r^a$ | $r^2$ (percent) |
| I | 58.1 | 33.5 | .57 | 33 | I | 54.5 | 21.8 | .54 | 29 |
| II | 12.2 | 23.5 | .61 | 37 | II | 8.1 | 10.1 | .33 | 11 |
| III | 6.1 | 10.9 | .29 | 8 | III | 7.2 | 22.2 | .56 | 31 |
| IV | 5.2 | 8.3 | .28 | 8 | IV | 6.0 | 20.0 | .50 | 25 |
| V | 4.5 | 9.9 | .38 | 14 | V | 5.2 | 6.9 | .22 | 5 |
| Total | 86.1 | 86.1 | | 100 | Total | 81.0 | 81.0 | | 101 |

[a]$r$ = correlations between PACT scores and rotated factor scores.

items in the two PACT forms. Several characteristics of the unrotated factor matrix indicate there is a large general factor in both the advisors' and the counterparts' forms. First, all 20 items are positively loaded on the first unrotated factor. The median loading for the advisor items is .78 with a range from .41 to .92. Within the entire remainder of the unrotated matrix, a matrix consisting of 180 factor loadings (20 items and nine remaining factors), only six of the coefficients are above .50. Thus, when judged by means of the unrotated factor structure it seems clear that almost without exception a single general factor underlies the items in the advisors' form of the PACT.

A similar inspection of the counterparts' unrotated factor matrix again shows that each of those 20 items is positively loaded on the first factor. The median loading is .76 with a range from .30 to .90. Only two of the items load less than .50 on the first factor. Again, within the entire remainder of the matrix only six loadings of .50 or greater are found. When judged by means of these matrices, it seems clear that the procedure used to collect and screen items for inclusion in the PACT was successful in yielding quite homogeneous items. It seems most probable that the homogeneity observed reflects the existence of a pervasive factor that is evaluated in contents.

Several numerical characteristics of the unrotated PACT factors are worth noting before proceeding to an interpretation of the *rotated* factor contents. First, if factor extraction is terminated when the next factor accounts for less than 5% of the total variance, then it appears that four or five factors exist within both advisors' and counterparts' forms. Five factors account for about 80% or more of the total variances. Second, in both forms, the first unrotated factor accounts for more than 50% of the variance with succeeding factors rapidly falling off with regard to the percent of variance associated with them.

In order to achieve better definition of the structure of these factors they were rotated to the Varimax criterion of simple structure. Particular rotated factors were then chosen for closer examination by means of two criteria. First, only the three rotated factors that collectively accounted for the largest proportion of the total PACT factor score variance were examined; the two advisor and counterpart factors which yield the lowest correlations with factor scores were excluded. Second, despite the fact that the two forms do not contain completely identical items, indices of factorial similarity were computed to identify whatever major relations might exist between the two factor structures.

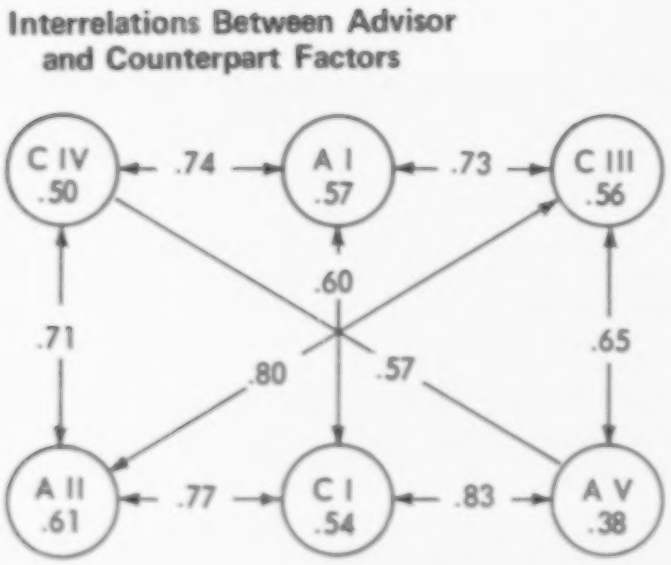


Figure 4

When the matrix of intercorrelations is examined with regard to the three factors most highly related to the PACT factor scores, it becomes possible to diagram the interrelations between the two sets of factors, as shown in Figure 4 (Appendix E contains the complete matrix of indices of factorial similarity). Thus, examination of the contents of the forms of the PACT is limited to Factors I, II, and V for advisors and to Factors I, III, and IV for counterparts.

While the coefficients[9] in Figure 4 provide a guide to the relations between factors, the items defining each factor provide a more complete understanding of the basis for these relations. The items loading most highly on each of the rotated factors together with their respective means, standard deviations, and communalities are presented in Tables 8 and 9. Since the items were scored dichotomously (agree - disagree), the means represent the percentages of advisors and counterparts who endorsed the items. Thus, the means and standard deviations can be used to estimate the degree of agreement among advisors and counterparts with regard to their feelings and the actions they would take to terminate or continue working together.

Counterparts' First Rotated Factor

This factor accounts for more than half of the total unrotated variance and when rotated correlates with counterparts' total PACT factor scores .54, thus accounting for slightly less than one-third of the total PACT factor score variance. Six items load on this factor. These items characterize the advisor co-worker as one who is motivated to understand and assist ROKA. Two of the items loading on this factor explicitly queried the counterpart with regard to whether he wished to continue working with the advisor. Seventy-five percent responded affirmatively to Item 5 while 84% responded affirmatively to Item 2. Thus, the content validity of a portion of the total counterpart PACT score variance appears established. The willingness of counterparts to continue working with advisors appears largely influenced by counterparts' estimates of how strongly motivated the advisor is to understand their circumstances and to give them assistance that will improve upon them.

[9]Numbers within the circles express the extent to which total raw PACT scores correlate with each factor. Numbers between the arrows indicate the degree to which pairs of factors are similar.

Table 8

**Counterparts' PACT Scores: Rotated Factor Structure**

| Items (characteristics of current advisor) | | Factor I (21.8%) | Mean (percent) | SD (percent) | $h^2$ |
|---|---|---|---|---|---|
| 20 | My present advisor has shown a strong desire to understand conditions in ROKA. | .86 | 84 | 35 | .80 |
| 14 | My present advisor seems to be genuinely interested in giving assistance to ROKA. | .79 | 88 | 33 | .79 |
| 13 | My present advisor has tried very hard to find ways of improving ROKA. | .71 | 82 | 38 | .85 |
| 11 | The advisor with whom I now work has made significant contributions to strengthening and improving ROKA. | .68 | 80 | 40 | .76 |
| 5 | I would like my present advisor to extend his tour in Korea so that I could continue to work with him. | .57 | 75 | 44 | .73 |
| 2 | If my present advisor had a choice between continuing to work with me and changing to work with a different counterpart in ROKA, I would prefer that he continue to work with me. | .54 | 84 | 37 | .76 |
| **Items (current advisor compared to others)** | | **Factor II (10.1%)** | **Mean (percent)** | **SD (percent)** | **$h^2$** |
| 16 | I have had advisors in the past who were much better than the advisor with whom I currently work. | .93 | 49 | 50 | .94 |
| 18 | The advisor with whom I now work is the best advisor I have ever had. | .90 | 49 | 50 | .94 |
| **Items (hypothetical future relations)** | | **Factor III (22.2%)** | **Mean (percent)** | **SD (percent)** | **$h^2$** |
| 6 | *If* my present advisor ever returns to Korea for another tour of duty, I hope to have him as my advisor again. | .82 | 86 | 35 | .92 |
| 7 | *If* my present advisor ever returns to Korea for another tour of duty, I hope he would *not* be my advisor again. | .82 | 86 | 35 | .92 |

*(Continued)*

Table 8 *(Continued)*

**Counterparts' PACT Scores: Rotated Factor Structure**

| Items (hypothetical future relations) *(Continued)* | Factor III (22.2%) | Mean (percent) | SD (percent) | $h^2$ |
|---|---|---|---|---|
| 15 *If* all KMAG advisors were like my present advisor, the MAP would be much more helpful to ROKA. | .82 | 86 | 35 | .92 |
| 8 *If* I were going to be reassigned and thought my present advisor was competent to advise me in my new assignment, I would like to have him reassigned so that he could continue to work with me. | .71 | 82 | 38 | .57 |

| Items (negative evaluations) | Factor IV (20.0%) | Mean (percent) | SD (percent) | $h^2$ |
|---|---|---|---|---|
| 4 If I thought that a frank discussion with his U.S. superiors would enable me to get rid of my present advisor, I would do it. | .76 | 90 | 30 | .78 |
| 9 If I met my present advisor's superior officer I would try to give him the impression that my present advisor is being very helpful. | .72 | 92 | 27 | .77 |
| 19 ROKA would be better off if my present advisor were not in KMAG. | .72 | 88 | 33 | .79 |
| 12 ROKA has not benefited from any of the work of my present advisor. | .63 | 90 | 30 | .91 |
| 1 If I met my present advisor's superior officer I would find it difficult to say anything good about my advisor. | .61 | 84 | 37 | .76 |
| 17 The advisor with whom I now work is the worst advisor I have ever had. | .61 | 90 | 30 | .65 |
| 10 If my present advisor's tour in Korea was extended for some reason, I would be unhappy about continuing to work with him. | .60 | 84 | 37 | .72 |

| Items | Factor V (6.9%) | Mean (percent) | SD (percent) | $h^2$ |
|---|---|---|---|---|
| 3 If a good friend had a choice of assignments, I would not recommend my assignment if he would have to work with my present advisor. | .93 | 69 | 47 | .89 |

Table 9

**Advisors' PACT Scores: Rotated Factor Structure**

| Items (negative evaluation) | Factor I (33.5%) | Mean (percent) | SD (percent) | $h^2$ |
|---|---|---|---|---|
| 4 If I thought that a frank discussion with his ROKA supervisors would enable me to get rid of my present counterpart, I would do it. | .94 | 94 | 24 | .98 |
| 7 If I ever return to Korea for another tour of duty in KMAG, I hope that I would *not* have to work with my present counterpart again. | .94 | 94 | 24 | .98 |
| 10 If my present counterpart is not rotated soon to a different position, I will be unhappy about continuing to work with him. | .94 | 94 | 24 | .98 |
| 18 I hope that I never have to work with another counterpart who is like the one with whom I now work. | .94 | 94 | 24 | .98 |
| 3 If a good friend had a choice of assignments, I would not recommend my assignment if he would have to work with my present counterpart. | .81 | 96 | 20 | .90 |
| 2 If my present counterpart had a choice, I would prefer that he choose to work with a different advisor. | .74 | 92 | 27 | .94 |
| 19 I will feel very relieved if my present counterpart is transferred to a position to which I will not serve as an advisor. | .74 | 92 | 27 | .94 |
| 1 If I met my present counterpart's superior officer, I would find it difficult to say anything good about my counterpart. | .65 | 98 | 14 | .88 |

| Items | Factor II (23.5%) | Mean (percent) | SD (percent) | $h^2$ |
|---|---|---|---|---|
| 9 If I met my present counterpart's superior officer, I would try to give him the impression that my counterpart is being very helpful. | .80 | 88 | 33 | .71 |
| 16 If I return to Korea in the future as a KMAG advisor, I would expect to be working with a counterpart who is much better than my present counterpart. | .79 | 84 | 37 | .68 |
| 14 My present counterpart seems to be genuinely interested in cooperating with KMAG. | .73 | 86 | 35 | .90 |
| 15 If all ROKA counterparts were like my present counterpart, the MAP would be much more helpful to the United States. | .73 | 80 | 40 | .83 |

*(Continued)*

Table 9 *(Continued)*

**Advisors' PACT Scores: Rotated Factor Structure**

| Items *(Continued)* | Factor II (23.5%) | Mean (percent) | SD (percent) | $h^2$ |
|---|---|---|---|---|
| 6 If I ever return to Korea for another tour of duty, I hope to be able to work with my present counterpart again. | .69 | 82 | 38 | .78 |
| 5 I would like my present counterpart to remain in his present assignment so that I can continue to work with him. | .61 | 90 | 30 | .92 |
| 13 My present counterpart has tried very hard to find ways of improving ROKA. | .60 | 84 | 37 | .79 |
| 8 If my present counterpart had a choice between continuing to work with me and changing to work with a different advisor in KMAG, I would prefer that he continue to work with me. | .53 | 92 | 27 | .93 |

| Items | Factor III (10.9%) | Mean (percent) | SD (percent) | $h^2$ |
|---|---|---|---|---|
| 12 ROKA has not benefited from any of the work of my present counterpart. | .92 | 96 | 20 | .96 |
| 8 If my present counterpart had a choice between continuing to work with me and changing to work with a different advisor in KMAG, I would prefer that he continue to work with me. | .54 | 92 | 27 | .93 |

| Items | Factor IV (8.3%) | Mean (percent) | SD (percent) | $h^2$ |
|---|---|---|---|---|
| 17 I would *not* inconvenience myself to continue working with my present counterpart. | .78 | 70 | 47 | .77 |
| 13 My counterpart has tried very hard to find ways of improving ROKA. | .52 | 84 | 37 | .79 |

| Items | Factor V (9.9%) | Mean (percent) | SD (percent) | $h^2$ |
|---|---|---|---|---|
| 11 The counterpart with whom I now work has made significant contributions in strengthening and improving ROKA. | .69 | 78 | 42 | .70 |
| 20 I have met some counterparts with whom I thought I would much more prefer to work than my present counterpart. | .67 | 71 | 46 | .64 |

### Advisors' First Rotated Factor

This unrotated factor accounts for more than one-half of the total variance factored and when rotated correlates with advisors' total PACT factor scores .57, thus accounting for one-third of the total factor score variance. Eight items clearly define the rotated factor, and are descriptive of actions that would lead to termination of work relations with the counterpart. Typical of these items is the following: "If I thought that a frank discussion with his ROKA superiors would enable me to get rid of my present counterpart, I would do it." Between 92% and 98% of advisors disagreed with the items defining Factor I. Thus, while the advisors' first rotated factor differs from the counterparts' with regard to directionality of contents, their overwhelming rejection of the actions described by the items seems sufficient evidence with which to establish the content validity of the advisors' major PACT factor. The index of factorial similarity between these first factors is .60.

### Counterparts' Third Rotated Factor

While the counterparts' third factor accounts for relatively little of the unrotated variance, when rotated it increases to 22% and then accounts for nearly one-third of the total PACT factor score variance. Three of the six items loading on this factor characterize the advisor as one who has contributed nothing of significance to ROKA. Eighty-six percent or more of the counterparts disagreed with these items. Three of the items loading on this factor explicitly inquire about the counterpart's attitude toward resuming work with the advisor in the future, or maintaining the present relationship. Seventy-five percent or more of the counterparts responded affirmatively to the idea of perpetuating the work relationship. The third counterpart factor appears to differ from the first primarily in terms of its mixture of positive and negative items and in items concerning attitudes toward more future-oriented work relations. Despite these variations, the two factors appear to represent only somewhat different approaches to assessing their willingness to work together.

### Advisors' Second Rotated Factor

This factor, which accounts for about 12% of the unrotated variance, when rotated accounts for about twice as much variance and correlates more highly with PACT factor scores than any other factor. In contrast to the advisors' first factor, this one is composed of items that (with the possible exception of Item 16), express complimentary attitudes toward the counterpart and desire to continue working with him. In general, the items loading most highly on this factor characterize the counterpart as one who is interested in cooperating with KMAG, who is attempting to improve ROKA, and with whom the advisor would willingly relate in the future. Eighty-two percent of the advisors agreed that, "If I ever return to Korea for another tour of duty, I hope to be able to work with my present counterpart again." This factor is related to each of the three major counterpart factors (see Figure 4).

### Counterparts' Fourth Rotated Factor

This factor, which accounts for about 6% of the unrotated variance, when rotated increases to 22% and correlates with counterparts' PACT factor scores only somewhat less than the two preceding factors. It is similar to both the first and second advisors' factors. The seven items loading most highly on this factor are similar in that all are rather strongly uncomplimentary to the advisor and descriptive of actions that would result in the dissolution of the relationship to the advisor. Eighty-four percent or more of the counterparts rejected these statements as being true of their attitudes toward advisors.

Only 10% of the counterparts agreed that, "The advisor with whom I now work is the worst advisor I have ever had." This factor is related to both the first and second advisor factors.

### Advisors' Fifth Rotated Factor

Identification and inclusion of a fifth advisor factor as a possible influence upon advisors' total PACT scores may be questioned by several of its characteristics. First, since it accounts for only 4.5% of the total unrotated variance factored, its very extraction from the matrix of intercorrelations may simply reflect rounding errors. Second, relative to Factors I and II it accounts for a small portion of the PACT score factor variance. Third, only two items clearly load on the factor, thus making interpretation of the factor hazardous and probably undependable. It is reported here only to complete the description of the results obtained from the analyses. Despite the unclear nature of this factor it is similar to both the first and third counterpart factors. The basis for the association with those factors probably rests on the fact that one of the items describes something less than highest praise for the advisor (an aspect of counterparts' Factor III), while the other item characterizes the advisor as having made significant contributions to ROKA (an aspect of counterparts' Factor I).

## Conclusions: PACT Score Content Validity

Any evaluation of the content validity of the PACT ultimately reduces to a subjective assessment of the adequacy of the original definition of the concept of proficiency for which the PACT was constructed. The arguments for regarding "cohesiveness" as an adequate conception of advisor proficency need not be recapitulated here. The present discussion, instead, is limited to a related question, viz., how well or poorly does the PACT appear to sample attitudes and actions that can be expected to bear relationships to the conception of proficiency being investigated? While there is no single crucial test capable of yielding an irrefutable and definitive answer to the question, it has been possible to assemble evidence from which a subjective appraisal can be drawn.

First, the items in both advisor and counterpart PACT forms do coalesce into a limited number of statistical factors that appear intuitively understandable and reasonable, in the sense that they match up with expectations based upon the conception of proficiency they were intended to assess. The counterparts' first factor is composed of items that are nearly all descriptive of judgments and actions that are likely to be associated with continuance of work with the advisor. The advisors' second factor is similar. Advisor and counterpart PACT factor scores both load on this factor and to nearly equal extents. Both advisor and counterpart forms yield factors that are composed of statements descriptive of attitudes and actions that would be expected to be associated with avoidance or termination of future interactions with consequences for their effectiveness. The advisors' first factor and the counterparts' second factor share this characteristic, and their PACT factor scores correlate with these factors nearly equally.

Finally, both forms yield a third factor, composed of a mixture of statements favorable and unfavorable toward the co-worker being judged. The advisors' fifth factor and the counterparts' third factor share this characteristic. However, the advisors' fifth factor is least related to their PACT factor scores of all the factors, while the counterparts' third factor is about as highly related to their factor scores as either of the other two factors. At a minimum, then, it appears reasonable to conclude that with regard to the purity of the two major factors emerging from the two forms of the PACT that the contents of these factors ought to be found related to advisors' and counterparts' decisions concerning their willingness to continue working together or wishes to terminate the relationship.

## Construct Validity

If PACT scores do yield estimates of the degree of cohesion that develops between advisors and counterparts, then the PACT scores might be expected to vary as a function of the rater's judgment of (a) the attractiveness of the personal traits of the co-worker being described, and (b) how satisfactorily the co-worker fulfills the judge's conception of how that role should be performed. The following two sections report the results of tests performed to assess the validity of the PACT scores as indirect measures of the conception of "cohesion."

### Interpersonal Attraction

Estimates of how attractively current co-workers viewed each other were collected by means of the co-worker Interpersonal Attraction Scales. Each advisor described the particular counterpart with whom he had worked to effect the most important changes and that counterpart in turn described the advisor. In addition, they also indicated by means of identical trait scales their conceptions of the kinds of persons with whom they preferred and did not prefer to work. Advisors and counterparts described their conceptions of both American and Korean co-workers with whom they most and least preferred to work. Thus, two somewhat different estimates of the relation between interpersonal attraction and PACT scores are possible—one based upon current co-workers' absolute descriptions of one another, and one based upon their description of one another relative to their conceptions of the traits defining a most- or least-preferred co-worker.

Both types of tests were performed. Three steps were required to determine whether their absolute descriptions of interpersonal attraction bore any relation to the PACT scores that were given and received: (a) Intercorrelating, separately for advisors and counterparts, the 38-trait scale ratings, (b) factor analyzing the correlation matrices by means of the Principal Axes method, and (c) computing individual factor scores that were then correlated with the PACT score given by each advisor and counterpart.

In order to estimate the extent to which the rating scales were used similarly or differently by the two groups, indices of factorial similarity were computed between the rotated factor matrices based upon advisors' and counterparts' factors. Indices of factorial similarity between the two sets of three factors that were rotated are shown in Table 10, while the percentage of variance associated with each factor and the correlation between total PACT scores with each of the three factors is presented in Table 11. Trait scales loading .50 or above on a factor are listed in Table 12. Complete rotated factor matrices together with individual trait scale means, standard deviations, and communalities appear in Appendix F.

Table 10

**Interpersonal Attraction Factors: Indices of Factorial Similarity**

| Advisor Factors | Counterpart Factors | | |
|---|---|---|---|
| | I | II | III |
| I | .90 | .59 | .80 |
| II | .79 | .80 | .67 |
| III | .74 | .80 | .83 |

Table 11

**Construct Validity Estimates: Correlations Between PACT Scores and Interpersonal Attraction Factor Scores**

| Advisors (*N* = 48) | | | | | Counterparts (*N* = 45) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Factor | Unrotated Variance (percent) | Rotated Variance (percent) | $r$[a] | $r^2$ (percent) | Factor | Unrotated Variance (percent) | Rotated Variance (percent) | $r$[a] | $r^2$ (percent) |
| I | 47.1 | 26.9 | .30 | .09 | I | 56.2 | 32.9 | .73 | .53 |
| II | 8.0 | 16.2 | .08 | .01 | II | 5.5 | 12.8 | .14 | .02 |
| III | 4.7 | 16.8 | .07 | .00 | III | 4.7 | 20.6 | .29 | .07 |
| Total | 59.8 | 59.9 | | .10 | Total | 66.4 | 66.3 | | .62 |

[a] $r$ = correlations between PACT scores and rotated factor scores.

Table 12

**Relations Between Rotated Interpersonal Attraction Factors and PACT Scores**

| Advisors' Ratings of Counterparts | | Counterparts' Ratings of Advisors | |
|---|---|---|---|
| Factor I (26.9% variance) | | Factor I (32.9% variance) | |
| Traits | Loadings | Traits | Loadings |
| productive | .87 | trustworthy | .83 |
| valuable | .83 | enthusiastic | .82 |
| competent | .82 | competent | .81 |
| industrious | .81 | harmonious | .81 |
| adaptable | .75 | thoughtful | .76 |
| superior | .75 | sincere | .76 |
| enthusiastic | .72 | PACT | .73 |
| leader | .71 | likeable | .72 |
| organized | .70 | consistent | .71 |
| wise | .66 | learned | .71 |
| learned | .62 | modest | .70 |
| thoughtful | .62 | valuable | .68 |
| sincere | .60 | industrious | .68 |
| consistent | .57 | civilized | .68 |
| trustworthy | .52 | friendly | .65 |
| likeable | .51 | rational | .64 |
| PACT | .30 | patient | .64 |
| | | pleasant | .62 |
| | | adaptable | .61 |
| | | organized | .60 |
| | | productive | .58 |
| | | tolerant | .55 |

*(Continued)*

Table 12 *(Continued)*

**Relations Between Rotated Interpersonal Attraction Factors and PACT Scores**

| Advisors' Ratings of Counterparts | | Counterparts' Ratings of Advisors | |
|---|---|---|---|
| Factor I *(Continued)* (26.9% variance) | | Factor I *(Continued)* (32.9% variance) | |
| Traits | Loadings | Traits | Loadings |
| | | wise | .55 |
| | | fair | .50 |
| | | kind | .50 |
| | | polite | .50 |
| Factor II (16.2% variance) | | Factor II (12.8% variance) | |
| Traits | Loadings | Traits | Loadings |
| pleasant | .84 | agreeable | .73 |
| polite | .78 | harmonious | .63 |
| patient | .62 | kind | .57 |
| economical | .61 | content | .53 |
| humble | .59 | polite | .52 |
| modest | .56 | forgiving | .51 |
| likeable | .55 | PACT | .14 |
| respectful | .53 | | |
| generous | .51 | | |
| kind | .50 | | |
| PACT | .08 | | |
| Factor III (16.8% variance) | | Factor III (20.6% variance) | |
| Traits | Loadings | Traits | Loadings |
| sympathetic | .72 | lucky | .80 |
| forgiving | .70 | forgiving | .67 |
| civilized | .65 | powerful | .66 |
| wise | .60 | leader | .65 |
| harmonious | .60 | civilized | .59 |
| powerful | .58 | generous | .57 |
| tolerant | .55 | productive | .57 |
| considerate | .55 | valuable | .57 |
| fair | .53 | sympathetic | .56 |
| economical | .52 | tolerant | .54 |
| PACT | .07 | respectful | .53 |
| | | content | .52 |
| | | learned | .51 |
| | | considerate | .51 |
| | | PACT | .26 |

The matrix of factorial similarity coefficients shows that all factors are positively related, and most are also quite high. Second, although the diagonal coefficients are as high as or higher than any of the off diagonal entries, in nearly all comparisons the differences are so small that they are best ignored. Indeed, while the counterparts' Factor II and advisors' Factor II yield an index of similarity equal to .80, the counterparts' Factor II and the advisors' Factor III also yield an index of .80. These, and the remaining relations, make it reasonable to interpret the results as reflecting a single, general dimension. This dimension can, however, be explored in greater detail through rotation of the factors. Since both sets of ratings involved highly evaluative components, these relations most likely result from this common variance. In contrast, what appears to give rise to three factors are differences between the ratings with regard to *what* is being described.

The advisors' and counterparts' first factors account for somewhat less than 50% of the variance for advisors and somewhat more than that for counterparts (see Table 11).[10] The personal trait scales loading on these factors .50 or higher are compared in Table 12. Judging from the trait scales loading most highly on the advisors' first factor, advisors tend to focus, when describing a counterpart, upon how competently and productively he performs his job, though several "character" traits tend to be included in these descriptions. Counterparts, it appears, tend to evaluate advisors both with regard to how competent, productive, and industrious they are and simultaneously on several facets of "character." The "character traits" of advisors most salient to counterparts appear to be trustworthiness, sincerity, and ability and motivation to establish and maintain harmonious interpersonal relations to them.

More than counterparts, advisors appear to compartmentalize or treat in a discrete fashion the task and social types of competences of co-workers. Conversely, counterparts, more than advisors, tend to give more holistic types of descriptions about their immediate co-workers. If it is assumed that the development of cohesive relations between advisors and counterparts may reflect both the task and their social competency, it is not surprising that the PACT scores given by advisors and counterparts correlate to quite markedly different degrees with these first factors. PACT scores given by counterparts to advisors correlate substantially (.73) with factor scores derived from the counterparts' first factor, as shown in Table 11. In contrast, PACT scores given by advisors to counterparts hardly tend to covary at all with factor scores derived from their first personal trait factor.

PACT scores are best regarded as not reflecting the co-worker personal traits that define the remaining pairs of factors obtained from each group.[11] Advisors' second and third factors appear similar in the sense that both seem to reflect the tendency for an advisor to describe his counterpart in terms of how adequately he takes into account the advisor's self-esteem or conversely how hostile and competitive he seems to be, and differ with regard to the social distance or degree of closeness that has developed between advisors and counterparts. Traits defining the advisors' second factor tend to be those that are most likely to be expected from co-workers or associates with whom one is not relating in a very intimate way. Those traits defining the advisors' third factor would appear to be of a type that would become rather critical to co-workers who are well acquainted and, hence, in a position to harm or help one another.

Whereas the second factor suggests a tendency by advisors to view counterparts in terms of how deferential and ego-subordinative they are, the third factor tends to suggest that they also view them in terms of how understandingly and non-punitively

[10] Advisors and counterparts' first rotated factors account, respectively, for 26.9% and 32.9% of the factor variance.

[11] The two pairs of factors account for approximately equal percentages of rotated factor variance.

they relate to them. Counterparts, on the other hand, appear to focus less than advisors upon ego-subordination and interpersonal understanding as separate matters. Instead, judging from the second and third counterpart factors, counterparts tend to focus upon how agreeably and smoothly the advisor relates to them, plus how much power he possesses and whether he uses it to enhance or diminish their sense of well-being. The differences between these two sets of factors tend to be configural, rather than typal.[12]

Although the contents of the last two factors are of some general interest in themselves, they offer little as sources of information for estimating the construct validity of the PACT scores. Whether separately or conjointly considered, they account for but a small percentage of advisors' and counterparts' descriptions of one another and appear to have essentially no influence upon their PACT scores.

Relative expressions of interpersonal attraction were obtained by comparing the ratings current co-workers assigned to each other to their descriptions of most- and least-preferred co-workers. These comparisons represent attempts to find whether willingness or unwillingness of advisors and counterparts to continue working together, as measured by PACT scores, varies as a function of how personally attractive or unattractive they view one another. To test the hypothesis that proficiency does vary as a function of how attractively the co-worker is viewed, total PACT scores were correlated with scores representative of how different the current co-worker was judged to be from the rater's conception of most- and least-preferred co-workers.

Results based upon advisors' comparisons of the personal traits of current counterparts to their conceptions of most- and least-preferred co-workers are shown in the upper half of Table 13. The differences between the mean Interpersonal Attraction Scores (IASs) associated with most- and least-preferred co-workers suggest that, on the average, advisors judge their current counterparts to be more similar to their conceptions of a most-preferred co-worker than to a least-preferred co-worker. Three of the four correlations between IAS scores and PACT scores are significantly different from zero. The two upper coefficients indicate that the smaller the difference between the advisors' descriptions of their most-preferred American and Korean co-workers and their descriptions of current counterparts, the higher are the PACT scores given to counterparts. Conversely, the third coefficient indicates that the larger the difference between their descriptions of least-preferred American co-workers and their current counterparts, the larger are the PACT scores given to counterparts. In short, the more current counterparts resemble co-workers with whom advisors prefer to work, the more likely it is they will express a greater willingness to continue working with them. Advisors' conceptions of least-preferred Korean co-workers appear not to influence their judgments of current counterparts to the extent of being registered by PACT scores.

The correlation coefficients in the right-hand column represent relationships between how similar or different advisors judged their current counterparts to be relative to their conceptions of most- and least-preferred co-workers and the PACT scores that their particular counterparts gave to them. The two sets of data were collected completely independently of one another. The top-most coefficient indicates that, on the average, advisors who view their counterparts as being very different from their conceptions of a most-preferred American co-worker are less likely to receive high PACT scores from their counterparts. The second coefficient, although only of borderline statistical significance, indicates a similar effect when the comparison is made to a most-preferred Korean co-worker. They do, however, suggest the possibility that some advisors, directly or indirectly, communicate to counterparts their preference for working with some Americans more than the counterpart because of his personal traits. This

[12] For a more complete and detailed discussion of co-worker personal trait factors, see the second report in the MAP II series (2).



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Table 13

**Construct Validity Estimates: Correlations Between PACT and Interpersonal Attraction Scores (IAS)[a]**

| Current Counterpart Compared to: | IAS | | | Advisors' PACT Scores | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Given | | | Received | | |
| | *N* | Mean | SD | Mean | SD | *r* | Mean | SD | *r* |
| Most-Preferred American | 46 | 7.7 | 3.3 | 17.7 | 4.2 | −.46[c] | 16.3 | 5.2 | −.30[b] |
| Most-Preferred Korean | 46 | 6.6 | 3.0 | 17.7 | 4.2 | −.39[c] | 16.4 | 5.2 | −.27 |
| Least-Preferred American | 46 | 18.6 | 5.8 | 17.7 | 4.2 | .36[b] | 16.3 | 5.2 | .10 |
| Least-Preferred Korean | 46 | 16.5 | 5.5 | 17.5 | 4.7 | .22 | 16.5 | 5.2 | .18 |

| Current Advisor Compared to: | IAS | | | Counterparts' PACT Scores | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Given | | | Received | | |
| | *N* | Mean | SD | Mean | SD | *r* | Mean | SD | *r* |
| Most-Preferred American | 31 | 6.6 | 5.0 | 15.3 | 6.2 | −.22 | 17.9 | 4.2 | −.10 |
| Most-Preferred Korean | 38 | 8.9 | 4.0 | 16.0 | 5.8 | −.63[d] | 17.8 | 4.3 | .12 |
| Least-Preferred American | 35 | 17.1 | 9.3 | 16.7 | 5.2 | −.04 | 17.8 | 4.0 | .16 |
| Least-Preferred Korean | 35 | 19.8 | 6.8 | 15.9 | 5.9 | .36[b] | 17.7 | 4.5 | .04 |

[a]IAS scores represent the average number of scale units difference between ratings over the 38 trait scales given to a current co-worker and ratings given to the two types of most- and least-preferred co-workers. Individual difference scores were computed by subtracting the rating given to a current co-worker from one of the other co-worker concept ratings on each trait scale, squaring the difference, summing the squared difference over the 38 traits scales and finding the square root of the sum. Group means were computed by summing over the number of subjects in the group and dividing by that number.

[b]=two-tail ($p<.05$)

[c]=two-tail ($p<.01$)

[d]=two-tail ($p<.001$)

appears to have an effect upon the PACT scores some advisors then receive from some counterparts. The effect is consistent with the prediction made earlier that, given the conditions under which advisors attempt to achieve MAP objectives, "... Americans who are predominantly task-oriented toward counterparts will be least likely to accomplish their mission."

Results based upon counterparts' comparisons of the personal traits of current advisors to their conceptions of most- and least-preferred co-workers are presented in the lower half of Table 13. The differences between the mean IASs associated with most- and least-preferred co-workers suggest that counterparts tend to view advisors as being less similar to their conceptions of a most-preferred Korean co-worker than to a most-preferred American co-worker. In addition, these differences appear larger, on the average, than the differences advisors judge to exist between their conceptions of most-preferred American and Korean co-workers and their current counterparts. The data suggest that counterparts view advisors as approximating their conceptions of a most-preferred co-worker less than advisors view current counterparts approximating their conceptions of most-preferred co-workers. Which, if any, of these differences affects the PACT scores counterparts gave to their advisors was tested.

Two of the four correlation coefficients that were computed on these data are significantly different from zero. Both of the significant coefficients are based upon counterparts' comparisons of their current advisor to their conceptions of Korean, not

American, co-workers. The largest and most highly significant coefficient to emerge from this analysis indicates that counterparts who view their advisors as differing greatly from their conception of a most-preferred co-worker tend, on the average, to give them lower PACT scores. The second significant coefficient describes the relations in reverse. Counterparts who view their current advisor as differing greatly from their conception of a least-preferred Korean co-worker, but not an American, tend, on the average, to give higher PACT scores to their advisor.

In contrast to the finding that PACT scores given by counterparts were related to how attractively their advisor described them, the comparable coefficients between the PACT scores advisors gave to their counterparts and how attractively their counterpart had described them are essentially zero. These comparisons suggest that counterparts are aware of how their advisor views them, which influences to some extent their willingness to continue to work with him. Parallel comparisons suggest that either advisors are unaware of how their counterpart views them, they discount this information when expressing their willingness to continue working with him, or statistical artifacts prevent relationships from achieving clarity.

While counterpart data, for both IAS and PACT scores, yield lower means and higher standard deviations than do the advisor data, the differences appear too small to rule out alternate interpretations. Further exploration, designed specifically to test the alternate interpretations, would be required to reach a conclusion.

## Critical Role Behaviors

Estimates of advisors' satisfaction with their counterparts' role performances (and vice versa) were obtained from their ratings of one another on items forming the Critical Role Behavior Inventories. The Advisor Behavioral Inventory (ABI), with which each counterpart described a particular advisor, contains 124 items while the Counterpart Behavioral Inventory (CBI), with which each advisor described a particular counterpart, contains 67. Lists of the items, with the percentages of advisors and counterparts endorsing each of several item alternatives, appear as appendices in the second MAP II report along with a discussion of the development of the method and results of analyses (2).

In this report the use of these observations is limited to determining relationships between advisors' and counterparts' perceptions of how adequately the other enacts his role, and their expressions of willingness to continue working together (PACT Scores). The steps involved in testing for relationships included: (a) scoring each individual's responses in the Inventory to yield three estimates of satisfaction with co-worker's role performance, and (b) correlating the three scores with the PACT scores they gave to their co-worker as well as those they received from them. The product-moment correlation coefficients are shown in Table 14. The mean percentages of items within each of the Inventories that, in the judgment of the respective groups, should occur more often, and those that should occur less often than was typical of their current co-worker, and the percentage of items descriptive of acts for which they indicated no change in the frequency of occurrence was desirable are also shown in Table 14.

Both groups, advisors and counterparts, are remarkably similar with regard to the estimates of satisfaction and dissatisfaction they expressed toward one another. On the average, advisors and counterparts appear satisfied with nearly three-fourths of the behaviors against which they evaluated one another; only about 27% of the actions described in the Inventories were judged to occur more or less often than it was thought desirable.

The probability values indicate that seven of the eight correlation coefficients computed between total Behavioral Inventory scores and PACT scores would have occurred by chance alone about one time in a hundred. Moreover, the pattern of signs

Table 14

**Correlations Between PACT and Behavioral Inventory Scores**

| Total Scores Obtained From ABI (percent) | | PACT Scores Counterparts Gave to Advisors ($n = 51$) | | PACT Scores Advisors Gave to Counterparts ($n = 51$) | |
|---|---|---|---|---|---|
| | | $r$ | $p$ | $r$ | $p$ |
| No change | 73.1 | +.60 | <.01 | +.34 | <.05 |
| More often | 14.4 | −.64 | <.01 | −.31 | <.05 |
| Less often | 12.4 | −.47 | <.01 | −.29 | <.05 |
| More + less | 26.8 | −.61 | <.01 | −.33 | <.05 |

| Total Scores Obtained From CBI (percent) | | PACT Scores Advisors Gave to Counterparts ($n = 51$) | | PACT Scores Counterparts Gave to Advisors ($n = 51$) | |
|---|---|---|---|---|---|
| | | $r$ | $p$ | $r$ | $p$ |
| No change | 72.6 | +.41 | <.01 | +.22 | NS |
| More often | 13.0 | −.50 | <.01 | −.25 | NS |
| Less often | 14.2 | −.27 | | −.17 | NS |
| More + less | 27.2 | −.40 | <.01 | −.22 | NS |

associated with the correlations are all in the direction predicted. The more often advisors and counterparts indicate that they feel no necessity for their co-worker to change his actions, the higher the PACT score given to him. Conversely, the greater the number of actions they feel their co-worker should display more or less often than is typical of him, the lower the PACT score given to him.

The coefficients shown in the upper right-hand segment of Table 14 were obtained by computing correlations between the PACT scores that advisors gave to counterparts and their counterparts' evaluations of them with regard to the items in the Behavioral Inventory. The coefficients in the lower right-hand segment were obtained by computing correlations between the PACT scores counterparts gave to advisors and their advisors' descriptions of them with regard to items in the CBI. The coefficients and probability estimates associated with the PACT scores advisors gave to counterparts suggest that these PACT scores may reflect advisors' perceptions of how satisfied or dissatisfied their counterparts are with them. Although the coefficients are not high, the pattern of signs is consistent with what would have been predicted and the coefficients would be expected to occur about five times in a hundred. Similar relations exist between the PACT scores counterparts gave to advisors and their advisors' satisfaction or dissatisfaction with them. The relations are, however, weaker and not statistically significant.

### Conclusions: PACT Score Construct Validity

A conception of cohesiveness has been given and a method with which to estimate it developed. The immediately preceding approach to estimating the validity of the PACT scores focused upon determining the degree to which variation in scores can be explained in terms of two characteristics of the co-workers being judged. Two instruments for measuring these characteristics were developed and scores derived from them tested for

relations to PACT scores. Inferences concerning the meaning of the PACT scores rest as much upon those instruments as they do upon the scores themselves. Thus, any estimate of the construct validity of the PACT scores must include an examination of the nature of these instruments and the scores they yield.

One major factor and two smaller ones appear to underlie advisors' and counterparts' judgments of each other's characteristic personal traits. The indices of factorial similarity between the two sets of factors are high enough to lead to the conclusion that they have much in common, which, given the nature of the traits defining the scales and the types of ratings obtained, seems to be the general "goodness" or "badness" of the person being described. In short, it seems reasonable to conclude that the two sets of factors most likely represent a social desirability dimension against which advisors and counterparts rated one another.

Rotation of the factors suggests that advisors and counterparts have somewhat different conceptions of the personal traits that define a highly desirable co-worker. For advisors, the largest component appears to be the competence, industriousness, and productivity of counterparts—ability to achieve work objectives appears superordinate in their judgments. Counterparts, on the other hand, while incorporating similar traits in their evaluation of an advisor, tend to extend the range of personal traits to include, and give greater importance to, what might be regarded as the advisor's character. Thus, the number of traits loading .50 or higher on the counterparts' and advisors' first factor is different. Twenty-five traits load .50 or greater on the counterparts' first factor, while only 16 traits achieve this loading on the advisors' first factor. Thirteen of the 16 traits appear on the counterparts' factor, but 12 of the traits appearing on the counterparts' first factor do not appear on the advisors'. Thus, the counterparts' first factor is more robust and richer in meaning than the advisors'.

The observation that the total PACT scores given by counterparts to advisors correlate to the extent of .73 with personal trait factor scores derived from the first factor supports the construct validity of those scores. The very low (.30) correlation observed between personal trait factor scores computed from the advisors' first factor with the total PACT scores given to counterparts seems, on the surface, counterindicative of the construct validity of those scores. However, certain characteristics of the raw data make unequivocal interpretation of these results difficult.

Without exception, the advisors' data are characterized by larger means and smaller variances than similar data from counterparts, for the PACT scores as well as for trait scales loading .50 or greater on each of the three factors extracted from both groups. Therefore, compared to counterparts' data, the advisors' data are more attenuated and, hence, intrinsically less capable of yielding relations than are the counterparts' data. Nevertheless, the present data from advisors offer little evidence to support the hypothesis that the PACT scores given to counterparts are valid in the sense that they vary as a function of the three personal trait factors that were used by them to describe counterparts. In contrast, the PACT scores given to advisors do appear to be valid estimates of proficiency in the sense that they vary as a function of the single most important factor to emerge from the personal trait factors counterparts used to describe their advisors. Further exploration, designed to overcome the restricted nature of the advisors' raw data, is required to achieve a more legitimate test of the construct validity of their PACT scores.

Clearer and more easily interpretable results supportive of the construct validity of the PACT were obtained from the correlations computed between PACT scores given and received and the personal attractiveness of co-workers as estimated by comparisons to their conceptions of most- and least-preferred co-workers. Those analyses showed that advisors and counterparts are similar in that both groups, in their willingness to continue working with another, appear to be more influenced by how much the particular person

departs from their conception of a most-preferred co-worker who is a member of their own ethnic group than by comparisons involving someone from a different group.

Moreover, advisors and counterparts are similar in that their willingness to continue working together appears to depend more on how much the co-worker being judged departs from their conception of a most-preferred co-worker than upon departures from their conceptions of a least-preferred co-worker. In view of the relations observed between the extent to which advisors' reported counterparts departing from their conceptions of a most-preferred American co-worker and the PACT scores that the counterparts gave to their advisor, there is additional evidence to support the construct validity of the conception of proficiency that has been advanced and in the ability of the PACT device to register variations in it.

In contrast to the mixed nature of the raw data and results emerging from analyses of the personal trait ratings, the results from the more comparable raw data concerning critical role behaviors offers more consistent evidence for the construct validity of both advisors' and counterparts' PACT scores. If it is accepted that estimates of advisors' and counterparts' satisfaction with the ways in which their respective co-workers are enacting their roles can be achieved by the Behavioral Inventory method, then the pattern and magnitudes of the correlations between these and the PACT scores give reason to ascribe some construct validity to the concept of proficiency that was used and the PACT method.

### Criterion-Related Validity

Estimates of this type of validity are ordinarily obtained by comparing scores derived from indirect measurements of proficiency to scores based upon direct observation of the behaviors and conditions that are regarded as exemplary instances of proficiency. Typically the degree of criterion-related validity is expressed by means of a correlation coefficient between the two sets of scores.

The use here of the concept of criterion-related validity departs from the customary in two ways: (a) There were no direct observations of the degree to which interactions between advisors and counterparts increased the military capability of ROKA and support for the policies and presence of the United States, and thus (b) the validity estimates that are obtained are less directly related to the ultimate criterion of proficiency than is typical of this approach.

### Job Characteristics

In this section the observations being tested for relations to PACT scores tend to differ from prior and subsequent data in terms of how directly they are related to, and descriptive of, specific work-related behaviors, conditions, and evaluations of them. The justification for regarding these tests as yielding estimates of the criterion-related validity of the PACT scores is based upon the view that the data entering into these estimates are somewhat more specific descriptions of how advisors and counterparts interacted and what outcomes were effected.

Results presented in this section also differ from those presented under the rubric of construct validity in that the tests here were not guided by hypotheses formulated prior to data collection. This and the remaining sections of the report are in the nature of a search for correlates and non-correlates of PACT scores—the approach of the detective more than of the lawyer or judge. The basic question here is, "To what extent do PACT scores reliably discriminate between and register *known* differences that exist among advisors and counterparts that could conceivably affect their chances of attaining the ultimate objectives of the MAP?"

From knowledge of these results it becomes possible to better specify the conditions that influence the PACT scores advisors and counterparts gave to one another and to compare them to those that might be expected to influence the development of cohesiveness. Tests yielding nonsignificant results, in this context, are often as important as those yielding significant results since both serve to delimit the number and types of factors that can be shown to create variation in the PACT scores. The approach and results presented in this section should, therefore, be regarded as directed toward the generation of hypotheses rather than tests of them.

Questionnaire items from the Advisors' Task Objectives Questionnaire (ATOQ) and the ABI concerning work-related aspects of advisor and counterpart relations that did and did not relate to the PACT scores each received are listed in Table 15.[13] It is hazardous to attempt brief descriptions of the similarities and differences that may exist between advisors and counterparts with regard to these items, or to generalize the differences between those characteristics that do and do not relate to the PACT scores. Generalizations based upon inferences from such empirical observations are uncertain to the extent that not all relevant observations are available—if additional items had been included in the questionnaires the patterns of relations might have changed.

Moreover, given the relatively limited number of items on which data were collected, failure to achieve one or two significant relations where significant differences now appear or, conversely, observation of significances where none now seem to exist might well have changed the types of inferences. Therefore, the following generalizations are tentative and intended primarily to simplify discussion of the results.

## PACT Scores Counterparts Received

Examination of the seven items found significantly related to the PACT scores counterparts received from advisors suggests that these items reflect the extent to which the advisor is personally involved in his advisory role. The hint is based upon the impression that (A1)[14] advisors who had the greatest freedom of choice in selecting and defining attempted changes gave, on the average, higher PACT scores to counterparts than other advisors, and tended to be more willing to continue working with the counterpart than those who were working on changes inherited from their predecessors, superior officers, or counterparts (Multiple Range Test, $p<.05$).

This generalization is suggested further by A2, A3, and A4, which are similar in that each is related to various estimates of the amount of time that advisor devotes to his work and meeting with the particular counterpart to whom he gave a PACT score. For example, advisors reported (A2) having met with their counterpart to effect the changes they sought on an average of between once a day and two to three times per week. A correlation of + 27 ($p<.05$) is obtained between the frequency with which they met to work upon changes the advisor sought and the PACT score the counterpart received. Advisors reported (A3) having devoted, on the average, about 69% of their duty time to advisory types of work. The associated standard deviation of 23.5% represents considerable individual differences. A correlation of +.32 ($p<.05$) is observed between these reports and the PACT scores counterparts received. Finally, advisors reported (A4) having spent, on the average, about 36 hours during the last month meeting with their counterpart for official business. The associated standard deviation of 36 hours represents considerable variation. A correlation of +.27 ($p<.05$) is observed between these estimates and the PACT scores counterparts received.

[13] A number of questionnaire items have not been included because too few observations per response alternative were obtained upon which to base tests.

[14] Alphanumeric designations in the text correspond to entries in Table 15.

Table 15

## Criterion-Related Validity Estimates: PACT Scores Tested for Relations to Job Characteristics[a]

| PACT Scores Counterparts Received Were Related To: | Questionnaire Source | PACT Scores Advisors Received Were Related To: | Questionnaire Source |
|---|---|---|---|
| A1 Source of information judged by advisor to have been most important in his decision to make the changes recommended to his counterpart. | ATOQ 16 | C1 Counterparts' beliefs concerning what were their advisor's primary concerns. | ABI-II-6 |
| A2 Frequency advisor reports having met with counterpart to effect changes he sought. | ATOQ 28a | C2 Average frequency per month counterpart reports meeting with advisor for official business. | ABI-II-9 |
| A3 Percent of duty time advisor devoted to advisory work. | ATOQ 6a | (C3) Percent of duty time counterpart spent on matters other than meeting with advisors, administration, and training troops. | ABI-V-5d |
| A4 Number of hours advisor reported spending with counterpart during last month for official business. | ATOQ 28b | C4 Adequacy of the frequency with which advisor is reported to meet with counterpart. | ABI -II-10 |
| (A5) Length of time progress retarded by obstacles advisor reports encountering. | ATOQ 22 | C5 Advisor's estimate of counterpart's agreement concerning desirability of making changes. | ATOQ 27 |
| A6 Advisor's reported satisfaction with progress made toward accomplishing the changes he sought. | ATOQ 15 | C6 Advisor's opinion concerning effectiveness with which counterpart participated in effecting the changes advisor sought. | ATOQ 29 |
| A7 Advisor's evaluation of counterpart's general military competence. | ATOQ 31 | C7 Advisor's evaluation of counterpart's general level of military competence. | ATOQ 31 |
| **PACT Scores Counterparts Received Were Not Related To:** | **Questionnaire Source** | **PACT Scores Advisors Received Were Not Related To:** | **Questionnaire Source** |
| A8 Advisor's judgment concerning what were his primary concerns. | ATOQ 11f | C8 Percent of duty time counterpart spends meeting with KMAG advisors. | ABI-V-5b |
| A9 Initial degree of agreement between advisor and counterpart concerning desirability of making changes advisor sought. | ATOQ 27 | C9 Percent of duty time counterpart spends of ROKA administrative matters. | ABI-V-5a |
| A10 Advisor's judgment concerning whether ROKA, KMAG or both had primary responsibility for implementing the changes he sought. | ATOQ 12 | C10 Percent of duty time counterpart spends training ROKA troops. | ABI-V-5c |
| A11 Advisor's judgment concerning whether ROKA, KMAG or both had primary responsibility for the obstacles that were encountered. | ATOQ 13 | C11 Number of months counterpart reports having worked with advisor. | ABI-II-1 |
| A12 Advisor's judgment concerning relative amount of work done by counterpart and ROKA to effect the changes he sought. | ATOQ 23 | C12 Counterpart's estimate of how helpful advisor had been. | ABI-II-11 |
| A13 Advisor's judgment concerning how well counterpart manages subordinates. | ATOQ 32 | C13 Counterpart's impression of advisor's general orientation toward the advisory role. | ABI-II-8 |
| A14 Whether or not the changes the advisor had sought had been achieved or were incomplete. | ATOQ 18 | C14 Amount of time and effort required to obtain KMAG's concurrence. | ABI-II-7 |
| A15 Advisor's estimate of total number of hours devoted to working on making the changes he sought. | ATOQ 20 | C15 Whether counterpart speaks English to advisor or uses an interpreter. | ABI-II-12 |
| A16 Advisor's estimate of total number of hours spent in face-to-face contact with counterpart to effect the changes he sought. | ATOQ 21 | | |

[a] ( ) indicates an inverse relationship, i.e. low PACT scores tend to be associated with greater degrees of the characteristic being reported.

Advisors' personal involvement with the work, as a determinant of the PACT scores counterparts receive, is further suggested by the finding (A5) that advisors who reported progress toward achieving the changes they sought had been delayed by obstacles for one month or more gave to counterparts PACT scores that were, on the average, significantly lower ($p<.05$, two-tailed Cochran-Cox $t$-test) than those given by advisors who had been delayed for one month or less.

Personal affective involvement in the work, as a determinant of PACT scores counterparts receive, is further indicated by the finding (A6) that advisors who reported some degree of satisfaction with the progress made toward accomplishing the changes they sought gave PACT scores that were, on the average, significantly different ($p<.05$, Multiple Range Test) from those given by advisors who reported some degree of dissatisfaction.

Finally, comparisons (A7) were made between advisors' judgments about their counterparts' general military competence, compared to American officers, and the PACT score their counterpart received. Advisors who judged that less than 40% of American officers could excel their counterpart's competence gave above-average PACT scores significantly more frequently ($p<.05$, chi-square test) to those counterparts than advisors who judged their counterparts could be excelled by 60% or more of American officers.

PACT scores counterparts receive appear not to reflect differences between advisors with regard to several characteristics of their jobs and how they were performed. The advisor's self report (A8) on the nature of his primary role appears unrelated to his willingness to continue working with counterparts. His willingness to continue appears not to be influenced by whether he views himself as primarily concerned with (a) procurement of supplies and equipment for counterparts, as 6% of the advisors did; (b) developing or modifying plans, policies, and regulations, as 60% of the advisors did; (c) providing technical know-how on the acquisition, storage, use, maintenance, and/or disposal of equipment or supplies, as did 23% of the advisors; or (d) monitoring requests from ROKA for U.S. funds, supplies, equipment, and/or their utilization and/or disposal as did about 10% of the advisors.

Neither do PACT scores reflect differences between advisors with regard to (A9) how much in agreement they were with their counterpart, from the start, concerning the desirability of making the changes upon which they subsequently worked. Approximately 37% of them reported having been in agreement on all of the changes and 57% with most of the changes, while only 6% reported having been in agreement on few of the changes. Nor does it appear that PACT scores reflect differences between advisors concerning (A10) their conceptions of who had primary responsibility for implementing the changes that were sought. About 43% of the advisors regarded primary responsibility as belonging to ROKA, 16% to KMAG, and 41% to both ROKA and KMAG.

Similarly (A11), while about 58% of the advisors indicated that ROKA had primary responsibility for overcoming the obstacles to progress that had arisen, 29% assigned primary responsibility to KMAG, and only 13% viewed the responsibility as something to be shared equally between ROKA and KMAG. These differences are not reflected in the PACT scores counterparts received.

Advisors, on the average, reported (A12) that counterparts had performed about 50% of the work involved in making the changes they sought. Although considerable differences were associated with advisor's estimates, they were found unrelated to the PACT scores counterparts received. PACT scores appear not to reflect advisors' judgments (A13) about how satisfactorily their counterpart manages his subordinates. On the average, advisors judged that "If it were possible to appoint the most highly qualified person in ROKA to my counterpart's position, I would expect the operations of my subordinates to improve by about 20%." Multiple Range Tests of the differences between PACT score means associated with the seven possible degrees of improvement given in the

item showed the differences were not statistically significant. PACT scores (A14) that counterparts receive appear not to reflect whether the changes they sought had or had not been completed at the time the PACT scores were given (*t*-test). Finally, differences between advisors concerning two temporal characteristics of their work relations to counterparts appear unrelated to the PACT scores counterparts receive.

On the average, advisors reported (A15) having devoted about 186 hours working on the changes they sought. Although considerable individual differences are reported (the standard deviation is about 234 hours), the correlation with PACT scores is −.17 which is not statistically significant. Similarly, while advisors, on the average, reported (A16) having spent about 94 hours in direct face-to-face contact with their counterpart as part of their effort to effect the changes they sought and despite the wide variation reported (the standard deviation is about 174 hours), a correlation with PACT scores of only −.09—which is not statistically significant—is observed. Why these characteristics of the advisory job are not registered by PACT scores while others are is not immediately clear. It appears that the present degrees of variation between advisors with regard to these temporal characteristics of their work relations to counterparts are at least not inconsistent with the development of cohesiveness.

## PACT Scores Advisors Received

PACT scores that advisors receive may reflect their counterpart's impression of what he is most concerned about in his official capacity as an advisor to ROKA (C1). No significant mean differences are observed between the PACT scores counterparts gave to advisors judged to be primarily concerned with procurement, planning, or instruction; however, each of the mean PACT scores associated with those concerns was found to be significantly higher (Multiple Range Test) than the mean given to advisors judged to be primarily concerned with monitoring requests from ROKA, ROKA's use and/or disposal of U.S. funds, supplies, and/or equipment. Counterparts, on the average, expressed significantly less willingness to continue working with the latter than with the former. The objectives of the advisor's personal involvement in his assignment may, therefore, affect the counterpart's elicitation of willingness to continue working with him.

There is evidence to support the belief that frequent contacts between counterparts and advisors tend to develop greater cohesiveness and the receipt of higher PACT scores from counterparts, but the findings are not entirely consistent. It is observed (in characteristic C2) that counterparts who gave advisors PACT scores above the mean of the entire distribution significantly more often ($p<.05$, chi square) reported having met with their advisors two to three times per week or more, while counterparts who gave PACT scores below the mean more often reported having met with their advisors less than two to three times per week. Perhaps related to this is the finding (C3) that the greater the percentage of duty time the counterpart reports devoting to matters *other than* meeting with advisors, administration, and training troops (an average of one-third of duty time), the more likely he is to give a lower PACT score to his advisor. Although the correlation between these estimates and the PACT scores they gave to advisors is only moderately negative ($r=-.31$), it is statistically significant ($p<.05$).

Evidence possibly counterindicative of a relationship is found in characteristics C8, 9, 10, and 11. Counterparts report (C8) spending an average of about 10% of their duty time meeting with KMAG advisors; the product-moment correlation between these estimates is −.03 which is not significant. Also they report (C9) spending, on the average, about 38% of their duty time on ROKA administrative matters. While counterparts who devote the greatest percentage of their duty time to administrative matters may tend to give advisors somewhat lower PACT scores, the coefficient based upon the present sample is only −.24, which is not significant. Neither does the number of months over which the

counterpart reports (C11) having worked with the advisor appear related to the PACT score given to him. While counterparts report, on the average, having known their advisor for 9.5 months, these estimates correlate to the extent of +.06 with the PACT scores advisors received. The correlation is insignificant.

The absence of relationships between PACT scores to characteristics C8, 9, and 10, together with the moderate relationships to 2 and 3, can be understood. Estimates of contacts with the advisor based upon the percentage of time devoted to various kinds of activities generally do not relate to any important extent to PACT scores that advisors and counterparts receive. Frequency of contact, per unit of time, does tend to be more strongly associated with PACT scores advisors receive. Specifically, there appears to be a critical level of contact associated with cohesiveness. Results indicate that this is a frequency of meeting with the advisor about two or three times per week. Moreover, findings associated with counterparts' evaluations of the adequacy of their meetings with advisors indicate (C4) significant differences between those evaluations and the PACT scores they gave to their advisor. Counterparts who reported that the frequency of meetings with advisors was insufficient to accomplish their work and who, therefore, indicated more meetings were needed gave significantly ($p<.05$) lower PACT scores to advisors than did counterparts who felt the frequency of meetings was adequate (Multiple Range Test).

A more striking determinant of the PACT scores that advisors receive appears to be their general evaluation of the counterpart's judgments, effectiveness, and competence. The information concerning characteristics C5, 6, and 7 was obtained from advisors who evaluated their counterpart with regard to each of those qualities. PACT scores that counterparts gave to their advisor were then tested for relationships to the evaluations their advisor made of them. The two sets of scores were, therefore, obtained by completely independent procedures with neither group aware of the fact each was rating the other on these characteristics. Despite the total independence on the data, it is found (C5) that advisors who indicated they and their counterpart had agreed from the beginning on the desirability of making most or all of the changes the advisor sought tend to receive higher PACT scores from their counterpart than advisors who indicated less agreement. The correlation between advisors' estimates of degrees of agreement and the PACT scores they received is +.26 which is statistically significant ($p<.05$). Second, it is also found (C6) that advisors who judge their counterpart to have been very effective in making the changes sought tend to receive higher PACT scores than advisors who regard their counterpart to have been less effective. In general, advisors regarded their counterparts to have been "very" or "moderately" effective. These judgments correlate with the PACT scores they received to the extent of +.36 which is statistically significant ($p<.01$).

Finally, it is found (C7) that the more highly advisors regard their counterpart's general level of military competence, the more likely it is that they will receive a high PACT score from their counterpart. On the average, advisors judge their counterpart to be functioning at a level of competence that could be exceeded by only about 40% of American officers. The correlation between these judgments and the PACT scores they receive is statistically significant ($p<.05$).

Two items appear unrelated to PACT scores because of the very limited range of responses given to them. When offered an opportunity to judge (C12) how helpful the advisor had been, apart from his role in obtaining MAP materials and funds, all of the counterparts described the advisor as being of some help and none selected the response alternatives including expression of wastefulness and unhelpfulness. Similarly, when offered the opportunity, none of the counterparts classified the advisor (C13) as one who ". . . seems to think that it is his job to criticize what is being done and place the blame on someone."

Two final job-related characteristics of advisors and counterparts failed to relate to the PACT scores advisors received. First, the amount of time and effort that counterparts reported (C14) having to devote to obtaining KMAG concurrence in order to proceed with their work appears unrelated to the PACT scores. While the few counterparts who reported that gaining concurrence was "Not involved in the work" gave the highest mean PACT scores to their advisors, those who reported it "Took a lot of time and effort" gave the next highest mean scores; the majority, reporting that it "Took a moderate amount of time and effort," gave the lowest average PACT score. Differences between the mean PACT scores associated with each of those response alternatives were not statistically significant (Multiple Range Test).

Second, whether the counterpart speaks directly to the advisor in English or uses an interpreter (none reported speaking to the advisor in Korean) is a difference not reflected by the PACT scores they give to advisors. Findings concerning this characteristic (C15) indicate that the mean PACT score given by the 31 counterparts who reported speaking English did not differ significantly from the mean PACT score given by the 20 counterparts who reported using an interpreter (*t*-test).

## Conclusions: PACT Score Criterion-Related Validity

Do PACT scores reflect the kinds of characteristics of advisor and counterpart jobs and interactions that augur for or against an interpretation of the scores as valid indicators of their willingness to continue working together? The kinds of work-related characteristics that seem to make a difference to PACT scores are presented in the first part of Table 15. PACT scores that counterparts receive appear influenced by the degree to which their advisor is personally involved in the advisory work, regards his counterpart as professionally competent, the degree of contact that he has with the counterpart, the autonomy he has with regard to the work, and extent to which he is satisfied with progress toward effecting the changes he seeks to make.

These characteristics make a certain amount of intuitive sense and seem not inconsistent with an interpretation of the PACT scores as valid indicators of the willingness of advisors to continue working with counterparts. If this be accepted, then how is it possible to explain the lack of significant relationships between PACT scores and the job-related characteristics as shown in the second part of Table 15? No conclusive answer is possible, given the limitations of the present data, but these data do allow for conjecture. If it is assumed that the willingness of advisors to continue working with counterparts depends, in part, upon the extent to which their expectations concerning the conduct of work are or are not met, then the absence of significant relations suggests that these characteristics of the work are those for which (a) advisors do not have strong and inflexible preconceptions, or (b) whatever the strength of their expectations, they are generally being met.

Because advisors did not provide expressions of how satisfied they were with characteristics A7-12 and 14, it is not possible to choose between the alternatives. However, evidence suggests that these characteristics are not likely to be those associated with dissatisfaction. The possibility remains that while these characteristics may be of great concern for some advisors, and influence the PACT scores they give, this is true of so few that group data fail to display the significances.

Characteristics C1-4 also seem intuitively reasonable correlates of PACT scores counterparts gave to advisors. The adequacy of the interactions is a particularly meaningful indicator of the validity of the PACT scores, because past occurrences are often the best predictors of what is likely to occur in the future. In the present context, the finding simply suggests that counterparts who have interacted frequently and adequately with advisors express, through the PACT, their willingness to continue the association.

Characteristics C5-7 augment the validity of PACT scores as estimates of the willingness of counterparts to continue to work with advisors, for they appear to reflect the sensitivity of counterparts to their advisors' evaluations of their effectiveness, competence, and judgment. These findings are consistent with what has become an almost omnipresent observation; that is, counterparts, more than advisors, seem more attentive to others and dependent upon them for the establishment and maintenance of a personal sense of worth and well-being. That the images of them that are reflected by their advisors should be reflected back in the PACT scores they gave to advisors is not inconsistent with an interpretation of those scores as indicators of the levels of cohesiveness that have been developed.

Explanation of the job characteristics unrelated to the PACT (C8-15) presents no special difficulties, although the present data do not permit actual tests of the explanation to be performed. It is, therefore, only conjectured that these characteristics are, at best, randomly associated with counterparts' developing impressions about the ways in which advisors seek to influence them and the frequency and adequacy of the meetings that ensue. Whether counterparts use English or rely upon interpreters to communicate with advisors appears to have no significant effect upon the perceptions of advisors for whom data are available. In general, it appears that classifications of the types of duties in which counterparts engage, when estimated as a percentage of their total duty time, does not have much influence upon the PACT scores they give to advisors. Absolute estimates, based upon average frequency of meeting per unit of time, seem more highly related for both advisors and counterparts.

### Social Interaction Characteristics

This section reports the results of tests performed to determine whether the types and frequencies of social interactions between advisors and counterparts are registered by PACT scores. The results may or may not be regarded as additional indicators of the extent to which validity can be ascribed to the PACT method. To view the results as evidence for or against the validity of the conception of proficiency that has been advanced, it must be assumed that attainment of increased military capability within the indigenous forces and increased support for the presence of U.S. forces and their policies may be influenced by the nature of the "off-duty" social interactions that do or do not develop between advisors and counterparts.

So that the reader may defer judgment on the tenability of the assumption until he is familiar with the results, they will be presented without regard to their possible value for assessing PACT score validity. Frequently the best guide to future interactions is obtained from records of past interactions. Since the results presented in this section deal entirely with records of previous social interactions between advisors and counterparts, they are relevant to efforts to estimate the willingness of persons to continue interacting in the future.

Advisors and counterparts provided records of their previous social interactions by means of items appearing in the Advisor's Task Objectives Questionnaire (ATOQ), the Advisor's Behavioral Inventory (ABI), and the Military Assistance Program Advisor Questionnaire (MAPAQ). Several statistical procedures were used to determine whether PACT scores were related to the types and frequencies of social interactions. The choice of procedure was largely determined by the characteristics of each item and the response alternatives available. Thus, some estimates are based upon comparisons between two or more PACT score means when classified according to the social interactions that were reported, while other estimates were obtained by way of correlations between PACT scores and numerical values assigned to the social interactions reported.

## Overview of the Results

Fifteen characteristics of the social interactions reported by advisors and counterparts were tested for relationships to the PACT scores they received from, or gave to, each other. Only three (20%) are found significantly related to the PACT scores counterparts received. Since *none* of the tests indicated that social interactions had significant effects upon the PACT scores advisors received, about 80% of the characteristics tested appear to have little influence upon either advisors' or counterparts' expressions of willingness to continue working together. Despite the absence of statistically significant results, there is a moderately consistent tendency *in the direction* in which social interactions are related to the size of the PACT score received. In general, the 15 social-interaction characteristics differ in the *extent* to which they appear to have an influence, rather than in the *direction* of the influence they have on PACT scores. The 15 characteristics are listed in Table 16 approximately in ascending order of the probability the results could have occurred by chance alone.

## Interactions Significantly Related to PACT Scores Counterparts Received

Three types of social interactions reported by advisors clearly have stronger effects upon the PACT scores they gave to counterparts than any of the remaining 12 characteristics tested. Those advisors who reported (A1) having interacted with counterparts under conditions not specifically described by the item alternatives but who wrote in "Other" types gave significantly higher PACT scores to counterparts than those who did not use the "Other" category.

Among the conditions described by the 13 advisors who did report "Other" types of activities were interactions in ROKA officers' clubs and messes, picnics, beach parties, shopping trips, attendance at movies, and trips to visit Korean religious and historical sites. This group of advisors gave an average PACT score of 19.4 to their counterparts in contrast to a mean of 16.9 given by those who reported none of these activities. The Cochran-Cox *t*-test (two-tail) indicates a statistically significant ($p<.01$) difference between the means.

The second type of activity that appears to strongly influence the PACT scores counterparts receive is sports. Those 12 advisors who reported having engaged in sports with the counterpart once or more during the last three months gave a mean PACT score of 19.5 in contrast to a mean of 16.9 given by the 38 advisors who did not. The Cochran-Cox *t*-test (two-tail) indicates a statistically significant ($p<.05$) difference between the means.

The third most important type of social interaction influencing the PACT scores counterparts receive is whether the advisor reports (A3) having been to the counterpart's home once or more during the last three months. The nine advisors who reported this activity gave a mean PACT of 19.2 to their counterparts in contrast to a mean of 17.2 given by the 41 advisors who did not report the activity. The Cochran-Cox *t*-test (two-tail) indicates a statistically significant ($p<.05$) difference between the means.

Product-moment correlations computed between the *number of times* the advisor reported having engaged, or not engaged, in these three types of activities yield coefficients in the twenties which are not significant. Thus, it is inferred that the component of these activities that seems to influence the PACT scores counterparts receive is not the frequency with which they occurred, but rather the factors associated with the decisions to engage in them and, possibly, the *infrequency* with which they occurred. Mean frequencies of interactions under these three types of conditions during the last three-month period were as follows: "Other" types of activities occurred about once during the three months; engagement in sports with the counterpart also occurred about once during the three months, while the 51 advisors reported having been to the counterpart's home an average of .28 times for the three-month period.

Table 16

## PACT Scores Tested for Relations to Social Interaction Characteristics[a]

| PACT Scores Counterparts Received Were Related To: | Questionnaire Source | PACT Scores Advisors Received Were Related To: | Questionnaire Source |
|---|---|---|---|
| A1 Advisor reporting having interacted socially with counterpart once or more during last three months under conditions not described by item alternatives, i.e., "Other" category. | MAPAQ 12G | None | |
| A2 Whether or not advisor reported having engaged in sports with counterpart once or more during last three months. | MAPAQ 12F | | |
| A3 Whether or not advisor reported having been to counterpart's home once or more during last three months. | MAPAQ 12C | | |
| **PACT Scores Counterparts Received Were Not Related To:** | **Questionnaire Source** | **PACT Scores Advisors Received Were Not Related To:** | **Questionnaire Source** |
| A4 Number of invitations advisor accepted during last month to be guest of members of ROKA. | MAPAQ 11B | (C1) Whether or not advisor reported having engaged in sports with counterpart once or more during last 3 months. | MAPAQ 12F |
| A5 Number of invitations advisor received during last month to be guest of members of ROKA. | MAPAQ 11A | C2 Counterpart's report of how often during an average month he interacts socially with advisor. | ABI-II-4 |
| A6 Whether counterpart expresses wish to meet socially with advisor more often or as often as has been typical of an average month. | ABI-II-5 | (C3) Advisor reporting having interacted socially with counterpart once or more during last 3 months under conditions not described by item alternatives, i.e., "Other" category. | MAPAQ 12G |
| A7 Advisor's report of total number of social interactions with counterpart under variety of conditions during last 3 months. | MAPAQ 12A-G | (C4) Advisor's report of total number of social interactions with counterpart under variety of conditions during last 3 months. | MAPAQ 12A-G |
| A8 Counterpart's report of how often during an average month he interacts socially with advisor. | ABI-II-4 | (C5) Whether or not advisor reported interaction with counterpart once or more during last 3 months in U.S. Officers' Club or Mess. | MAPAQ 12A |
| A9 Whether or not advisor reported interacting with counterpart once or more during last 3 months in a Korean restaurant. | MAPAQ 12B | C6 Advisor's report of number of invitations received from Korean civilians during last month to be their guest at a social function. | MAPAQ 12A |

(Continued)

Table 16 *(Continued)*

## PACT Scores Tested for Relations to Social Interaction Characteristics[a]

| PACT Scores Counterparts Received Were Not Related To: (Continued) | Questionnaire Source |
|---|---|
| A10 Whether or not advisor reported interacting with counterpart once or more during last 3 months in U.S. Officers' Club or Mess. | MAPAQ 12A |
| A11 Whether or not advisor reported regularly scheduled social or recreational activities with one or more members of ROKA, their families and friends. | MAPAQ 15 |
| A12 Whether or not advisor reported having interacted with counterpart once or more during last 3 months in advisor's home. | MAPAQ 12D |
| A13 Advisor's report of number of members of ROKA, their families and friends who have been guests of advisor during last month. | MAPAQ 14 |
| A14 Advisor's report of number of invitations accepted from Korean civilians during last month to be their guest at a social function. | MAPAQ 13B |
| A15 Advisor's report of number of invitations received from Korean civilians during last month to be their guest at a social function. | MAPAQ 13A |

| PACT Scores Advisors Received Were Not Related To: (Continued) | Questionnaire Source |
|---|---|
| C7 Advisor's report of number of members of ROKA, their families and friends who have been guests of advisor during last month. | MAPAQ 14 |
| C8 Advisor's report of number of invitations accepted from Korean civilians during last month to be their guests at a social function. | MAPAQ 13B |
| C9 Advisor's report of number of invitations accepted from Korean civilians during last month to be their guest at a social function. | MAPAQ 13B |
| C10 Whether counterpart expresses wish to meet socially with advisor more often or the same as has been typical of an average month. | ABI-II-5 |
| C11 Number of invitations advisor accepted during last month to be guest of members of ROKA. | MAPAQ 11B |
| C12 Number of invitations advisor received during last month to be guest of members of ROKA. | MAPAQ 11A |
| C13 Whether or not advisor reported having interacted with counterpart once or more during last 3 months in advisor's home. | MAPAQ 12D |
| C14 Whether or not advisor reported interacting with counterpart once or more during last 3 months in Korean restaurant. | MAPAQ 12B |
| C15 Whether or not advisor reported regularly scheduled social or recreational activities with one or more members of ROKA, their families and friends. | MAPAQ 15 |

[a]( ) indicates an inverse relationship, i.e. low PACT scores tend to be associated with greater degrees of the characteristic being reported.

The results provide an empirical basis from which to infer what might be the general kinds of social interaction determinants of PACT scores counterparts receive. First, several of the "Other" types of activities mentioned—also, possibly the participation in sports together, and very likely the counterpart's willingness to bring the advisor into his home[15]—suggest that these, more than other kinds of social activities, tend to be of a person-specific type. It seems reasonable to assume that important judgments are made by counterparts and advisors in deciding to spend their off-duty time with each other under these conditions. Second, the three characteristics are similar in that the interactions can occur only if both the advisor and the counterpart are willing to commit to each other, in advance, a portion of their future free time. On the assumption that each typically has available to him alternate and possibly competing ways of spending his off-duty time, the choice to spend it with each other, if only infrequently, perhaps reflects a degree of importance that other types of social interactions do not.

## Comparison of the Interactions to PACT Scores Advisors Received

These experiences, while apparently special with regard to the PACT scores advisors give to their counterparts, appear somewhat weaker determinants of the PACT scores advisors receive. Advisors who reported (C9) having been to the counterpart's home received from their counterparts an average PACT of 17.8, while those who did not report the activity received a mean of 15.8. Test of the mean difference yields a "$t$" value of 1.08 which is not statistically significant. The direction of the difference is, of course, consistent with the effect the experience appears to have upon PACT scores counterparts received. Further consistency is observed in the result obtained by correlating the number of times the advisor reports having been to the counterpart's home and the PACT score received by the advisor. The obtained coefficient of $-.06$ is not significantly different from zero.

The two remaining social interaction characteristics found related to the PACT scores counterparts receive appear to have *opposite* effects upon the PACT scores advisors receive, although the significance of them as having *any* effect is open to question. In any event, it is observed that advisors who reported (C2) having engaged in sports and (C3) "Other" types of social activities with their counterpart tend to receive lower PACT scores, and the *more often* they reported the activity to have occurred during the last three months the lower the PACT score they tend to receive. Advisors, for example, who reported having engaged in sports with their counterparts received a mean PACT of 14.4, while a mean of 16.7 was received by those who did not report the activity. Test of the difference between the means yields a $t$ of 1.07, which is not statistically significant. The product-moment correlation between the frequency of having engaged in sports and the PACT score received by the advisor is $-.36$ ($p<.01$). The scatter-diagram suggests, however, that the coefficient reflects only a few very extreme cases that would tend to regress toward the mean.

Similar results are obtained when the "Other" types of activities are tested; advisors who reported having engaged in them received an average PACT of 13.5 in

[15] Koreans, more than Americans, tend to regard their houses as private sanctuaries reserved primarily for family functions and ceremonies. Friendly relatives and close friends may visit, but aggregations of people such as are often found at cocktail parties in American homes are unlikely to be invited into a Korean home. Because Koreans, more than Americans, accept a more highly differentiated conception of the husband and wife roles and engage in more segregated types of activities, except for family ceremonies and celebrations much of the off-duty social interactions involving Korean males occur in public restaurants, tea rooms, kisaeng houses, beer halls, and makkoli houses. The choice depends largely upon what can be afforded, the person's social status, the number of persons involved, and the importance of the meeting.

contrast to a mean PACT of 17.1 received by those who did not report these types of interactions. Test of the difference yields a $t$ of 1.62 which is not statistically significant. The product-moment correlation between the frequency with which these activities were reported to have occurred and the PACT scores received by advisors is $-.28$ ($p<.05$). However, again the scatter-diagram suggests the effects of a few extreme frequency-of-interaction scores rather than a consistent trend.

The most supportable and conservative conclusion to be drawn from these findings seems to be that advisors who report having engaged in "special" types of social activities with their counterparts tend to express significantly greater degrees of willingness to continue working with them, but that the activities, with the exception of visits to the counterpart's home, are of a type which tend to elicit different feelings in counterparts toward their advisors. The findings suggest that American and Korean military personnel are differentially rewarded by these types of off-duty social activities.

Because these preliminary findings suggest that how they spend their off-duty time together may have an effect upon the willingness to work together, subsequent research might profitably focus upon determining the relative preference advisors and counterparts have for a much wider range of social activities. Similarities and differences might well contribute to the development of training objectives, content, orientation programs, and management policies for advisory personnel. Before that can be done there is a need to know more specifically what advisors and counterparts communicate to one another that might account for the apparently opposite effects that interactions under these conditions produce.

## Interactions Not Significantly Related to PACT Scores

As noted earlier, about 80% of the social interaction characteristics tested yielded statistically insignificant results when compared to the PACT scores received by advisors and counterparts. Brief statements descriptive of those characteristics are listed in Table 16 approximately in ascending order of the probability that they could have occurred by chance alone. In some cases, if only a one-tail probability estimate had been used the result would have been significant at the .05 level. Moreover, when the directions of the effects that all 15 social interaction characteristics appear to have upon the PACT scores received by both advisors and counterparts are examined, consistent similarities are found. Although seven logical outcomes are possible,[16] the present analysis more strongly suggests that only five outcomes exist in these data. Seven of the characteristics tend to increase the PACT scores for both advisors and counterparts, one tends to decrease the scores both receive, and four appear to have no effect upon either of the scores. Thus, 12 of the 15 characteristics (80%) appear to have similar effects upon both advisors and counterparts, and only three (20%) tend to have opposite effects.

Mutually Facilitative Conditions. The seven characteristics having a facilitative effect upon both the PACT scores advisors and counterparts received are: (a) (A4-C11) whether the advisor *accepted* invitations from ROKA and the number of them; (b) (A5-C12) whether the advisor *received* invitations from ROKA and the number of them; (c) (A6-C10) whether the counterpart expresses the wish to meet socially more often with the advisor or as often as has been typical during an average month; (d) (A11-C15) whether the advisor reported regularly scheduled social or recreational activities with one or more members of ROKA, their families and friends; (e) (A12-C13) whether the advisor reported having interacted with the counterpart once or more during the last three

[16] (1) Characteristic increases both PACT scores; (2) decreases both; (3) increases advisor's and decreases counterpart's; (4) opposite of 3; (5) increases advisor's but has no effect upon counterpart's; (6) opposite of 5, and (7) has no effect upon either advisor or counterpart.

months in the advisor's home; and, of course, the two significant conditions previously reported, viz., (f) (A2-C1) whether the advisor had been to the home of the counterpart and the counterpart's report (g) (A8-C2) of how often during an average month he interacts socially with the advisor.

These seven conditions, because they suggest the possibility that they may influence or reflect the development of mutually cohesive relations between advisors and counterparts—as inferred from relations to PACT scores—should be further investigated in an attempt to achieve more definitive conclusions.

Mutually Ineffective Conditions. For *both* advisors and counterparts about 26% of the comparisons showed an absence of any effect of social interaction characteristics upon PACT scores. The four characteristics having this in common were: (a) (A7-C4) total frequency of interaction reported by advisor to have occurred under all types of conditions; (b) (A13-C7) advisor's report of number of members of ROKA, their families, and friends who had been guests of the advisor during the last month; (c) (A14-C8) advisor's report of the number of invitations *accepted* from Korean civilians during the last month to be their guest at a social function; (d) (A15-C6) advisor's report of the number of invitations *received* from Korean civilians during the last month to be their guest at a social function. The absence of any apparent effects upon PACT scores by these social interaction characteristics is not surprising if, as earlier results indicated, the PACT scores tend to reflect person-specific kinds of interactions rather than social activities with people in general.

Mutually Inhibitive Condition. Social interactions that occurred under only one kind of condition tend, for both advisors and counterparts, to reduce the size of the PACT scores each receives from the other. Examination of the PACT scores as a function of whether the advisor reported (A10-C5) having met with his counterpart once or more during the last three months in the U.S. Officers' Club or Mess tends to suggest that such interactions tend to diminish the willingness of advisors and counterparts to continue working together. From the six advisors who reported not having met with their counterpart under these conditions counterparts received a mean PACT of 18.7, in contrast to a mean of 17.4 given by the 44 advisors who reported having met under those conditions. Test of the significance of the difference between the means yields a $t$ value of 1.28 which is not statistically significant.

Moreover, the product-moment correlation coefficient computed between the total number of times such interactions were reported and the PACT score given to the counterpart does not yield a significant value. In contrast, while the mean difference between the PACT scores received by advisors who did and did not report meeting with the counterpart under those conditions is even less significant (16.1 vs. 16.5), computation of the correlation between the number of times meetings under those conditions were reported and the PACT scores advisors received yields a coefficient of $-.29$ ($p<.05$). However, the scatter diagram suggests that the relationship between the two sets of scores is due primarily to a few extreme scores that can be expected to regress toward the mean. Additional observations and information about these conditions are needed to achieve a more definitive conclusion.

Opposite Trends. Three of the social interaction characteristics tend to have somewhat different effects upon the PACT scores advisors, in contrast to counterparts, received. Two tend to increase the PACT scores received by counterparts, but to decrease the size of those received by advisors. Those (A1-C3) and (A2-C1) descriptive of social activities involving sports and "Other" types of activities have previously been compared. The report on the effects of social interactions upon PACT scores can be completed by noting that advisors who report (A9) having interacted with their counterpart once or more during the last three months in a local restaurant tend to give higher PACT scores to their counterparts ($t$-test value 1.28), and the number of such interactions correlates

+.27 with the PACT scores they give. Neither result is statistically significant. Comparison of the mean PACT scores given by counterparts to advisors who did and did not report having interacted with them in local restaurants yields a $t$ value of .16 and a correlation of −.02 with the number of such meetings. Thus, while interactions under these conditions may tend to influence the PACT scores advisors give, not even a weak trend is observed between these interactions and the PACT scores counterparts give.

### Interpretative Summary

PACT scores were not found to be strongly influenced by the types and frequencies of social interactions surveyed in this study, with 80% of the tests performed yielding statistically nonsignificant results. A high degree of similarity was, however, observed in the directions of effects that many of the social interaction characteristics tended to have upon the PACT scores both advisors and counterparts received. Sheer frequency of social interactions between advisors and counterparts appears, *in general*, to have a somewhat weaker influence upon PACT scores than the conditions under which the advisor and counterpart meet off-duty. Present results suggest that social interactions that probably are of a person-specific nature (individual advisor vis-a-vis individual counterpart) tend to have the greatest amount of influence upon the PACT scores. Social interactions with people in general, including Korean civilians, other members of ROKA, their families and friends tend to have weak but facilitative effects upon the PACT scores advisors give, and even weaker effects upon the PACT scores counterparts give.

Two, of possibly three, conditions of social interaction were tentatively identified as having opposite effects upon the PACT scores advisors and counterparts received. While participation in sports with a counterpart appears to facilitate the advisor's willingness to continue working with him, the experience appears to have an opposite effect upon the counterpart. Why this may be true cannot be answered from the data analyses presently available—it can only be conjectured that these experiences are more rewarding to advisors than they are to counterparts.

It is conceivable that the sports activities in which the advisors engaged were the competitive kinds that *terminated* only when one person had become a "winner" and the other a "loser." Presumably, the types of activities in which the present sample of advisors engaged were those in which their counterpart lost more often than the advisor.

The plausibility of this interpretation is increased when the general status of sports in Korea is considered. First, the culturally traditional sports in which Americans and Koreans are taught to engage tend to be different kinds of physical activities. While Korean athletes who have performed well in international competitions have become "national heroes" to some segments of the population, political and economic factors, both historical and contemporary, have tended to inhibit the development of these heroes on a scale even remotely approximating the importance they have played in the socialization of most American males. In recent years this has tended to change, but Confucian attitudes and values concerning *these kinds of activities* certainly are not as promotive of the development of achievement strivings as are the values of American culture. Thus, an advisor who plays golf, handball, tennis, or any number of other sports popular with Americans may be further confirming his own identity and group membership, though similar effects may not occur with the counterpart. Thus, to the extent that the advisor's wish to engage in competitive activities requires the physical presence and participation of another person, and to the extent that the counterpart fulfills that need and thereby measures his performance against that of the advisor (also vice versa), interactions under these conditions might be more rewarding for advisors than they are for counterparts. This does not explain why counterparts who gave the lowest PACT scores to their advisors were among those whom advisors identified as having most frequently engaged in

sports. Why, if these interactions are unrewarding to them, and if the PACT scores are valid indices of their unwillingness to continue working together, do counterparts continue to participate in these activities?

The findings have served only to suggest an area of advisor-counterpart interactions that might be profitably explored. The speculations about the findings serve only to direct attention to the kinds of additional information that might permit empirical evaluations of the tenability of alternate explanations.

The second condition tentatively identified as having opposite effects upon the PACT scores received is really a collection of heterogeneous activities. Again, there is not enough detailed information about the specific characteristics of these types of social interactions to indicate what, if anything, they have in common. The available evidence simply shows that counterparts tend to receive higher PACT scores from advisors who report having gone with them to visit sites of religious or historical significance to Koreans, attended beach parties or movies, gone on shopping trips, met in ROKA officers' clubs and messes, or interacted at office parties. While the data are limited, one may speculate that what most of these activities may have in common is an unusually high degree of personal contact with American advisors under Korean living conditions.

The author recalls, from interviews with advisors and counterparts, reports of off-duty social interactions that "went sour" under these conditions. Although only a few such cases were brought to the author's attention, in seeking at least a tentative explanation for the apparently opposite effects of these experiences upon advisors and counterparts one can only use what is available. Substituting his own memories for the more desirable kinds of data from which the finding emerged, the author conjectures that these opposite effects occur because of the following conditions.

Some counterparts, anticipative of satisfying themselves by means requiring the participation of an advisor, agree and arrange to accompany the advisor into the local culture to a degree that the advisor probably would not do without the presence of a Korean known to him. Advisors' *reactions* to the conditions, then *directly observable* to the counterpart, are sometimes not as pleasing to the counterpart as he may have unconsciously assumed they would be or hoped them to be. Some counterparts, apparently eager to get to know their advisor outside of his official capacity or avail themselves of the logistics he may be able to provide, agree to serve something akin to the role of tourist guide for the advisor, perhaps expecting the experience to be equally rewarding to both. Unfortunately, the opportunity that these experiences provide for "testing of reality" by advisors and counterparts, at least occasionally, yields feedback that tends to disconfirm their expectations and introduces into their relationship a more uncomfortable degree of dissonance for counterparts than for advisors.

For example, the author recalls one advisor who eagerly accepted an invitation from a counterpart to take a trip, by jeep, to a remote mountain village to participate in a ceremony marking the completion of a civic action project. Knowing it was a long trip, the advisor had a box lunch prepared *for himself*. The counterpart and Korean driver had assumed that lunch would be taken at a Korean inn midway in the journey. The advisor reported no visibly unfavorable reaction from his counterpart as he ate his American box lunch in the inn while the counterpart ordered standard Korean fare, but it seems plausible that the advisor was communicating to his counterpart his unwillingness to eat Korean food, and that the counterpart was tempted to conclude that his advisor regarded the food as somehow "inferior" to his accustomed food.

Any allowances that the counterpart might have made during lunch were probably dispelled when, after the ceremony, the threesome checked into an inn where, prior to retiring, they ordered supper. The advisor was suddenly and without any desensitizing experiences confronted by the necessity of having to select an indigenous food. Though he asked his counterpart about the contents and preparation of each dish, he felt

uncomfortable about eating any of them and refused them all, communicating further rejection of foods highly regarded by his counterpart. The advisor solved the problem of his hunger by correctly assuming that there was probably a chicken available, but incorrectly assuming that fried chicken in Korea is about the same as fried chicken anywhere else in the world. (At this point the counterpart was probably feeling somewhat relieved that his advisor would not go hungry until he returned to his post.) Instead of a plump, crispy, golden brown chicken of the sort he had enjoyed stateside since childhood, he was served a small, emaciated bird too tough to cut easily. Hunger and a wish to avoid further rejection of the available food combined to motivate him to strip the legs and other easily scrutinized areas of the bird. Though hardly with a full stomach, he was able to go to sleep knowing that he had had at least something resembling what he expected even if the degree of conformity was perhaps more symbolic than nourishing.

By dawn, however, hunger began to dominate his awareness and he had an overwhelming desire for a hearty breakfast. Expecting the worst, but wishing for the best, he waited for breakfast to be served. As he sat in his room thinking perhaps of steak and eggs at the Officers' Club the maid slid open the door and presented him with his breakfast—the cold carcass of the chicken he had incompletely eaten the night before, with only the viscera and entrails left to be eaten! The advisor's instantaneous feeling of revulsion quickly, but incompletely, became dispersed by an insight: "I'm probably the only American she has ever served. She was aware I would not eat the kind of food she ordinarily serves to Koreans. Last night she learned that I liked fried chicken. Some Koreans eat pretty much the same menu at each meal of the day. Not knowing what else might please me, she made what she thought would be the safest choice and returned to me for breakfast what I did not finish last night."

During the long drive back over the rugged mountain roads, his stomach gnawed away at his composure and patience. Surely his counterpart must have felt that a potentially very special kind of outing together had been dampened by the advisor's rejection of Korean customs concerning food. It is unlikely that this particular counterpart will initiate future interactions with advisors under these conditions. That he might feel there are irreconcilable differences between them and that this might have influenced his answers to the questions from which a PACT score was obtained is possible enough. The outcome of the dashed expectations is unfortunate for it is possible to guide and inform advisors so they can manage the interpersonal aspects of these situations in ways that minimize the probability of alienating counterparts.

Korean foods are not, by any means, the only aspects of counterparts' lives to which advisors may inadvertently react in ways that communicate to counterparts a rejection. The author recalls a counterpart who, several years after the incident, relived his feelings when, following a hot summer afternoon of fishing with his advisor, they stopped at a country inn to quench their thirst. Makkoli[17] is a beverage enjoyed by innumerable generations of Koreans, especially when it is cooled and drunk in warm weather, much as many American males enjoy a cold bottle of beer after having mowed the lawn on a hot day. Unfortunately, makkoli seems to hit different spots depending upon whether it goes into a Korean or an American mouth and stomach.

It is not known whether the advisor had ever had an opportunity to become familiar with makkoli and the other important aspects of the situation in which his reactions were being monitored directly by his counterpart. The counterpart's recollection was that the advisor seemed to feel threatened by the consequences he imagined would result from

[17] *Makkoli* is an undistilled, fermented rice liquor. It has, roughly, the color and viscosity of skim milk, but the texture of a non-colloidal suspension such as a dilute milk of magnesia. The "chalky" texture leaves, at least in the author's mouth, an astringent sensation of the sort produced by alum.

drinking the beverage, and disappointed that the inn had no other, more familiar beverage. Though the counterpart, at a low level of awareness, seemed to sense the advisor's feelings, what achieved prominence in his consciousness was his own anger at having had his hospitality rejected. What had, until that moment, been an afternoon pleasantly spent with the advisor suddenly "went sour" as the advisor sat waiting for his counterpart and another ROKA officer to finish the pot of makkoli. Though they wished to order another pot, they deferred to the discomfort of the advisor, returned to the jeep and sped across the dusty country roads to the advisor's BOQ where he could, without uneasiness, quench his thirst.

The counterpart, still smarting from the rebuff, wondered aloud years later, "If you Americans dislike our customs so much, why do you send advisors here?" That these feelings might have influenced the way in which he answered the questions from which his PACT score was derived would not be surprising.

The anecdotes bring into view an important difference between American military personnel (shared by many of their civilian compatriots) and their counterparts in the armies of East Asia. There are many correlates of the difference, but the essential element consists of the emphasis that is given to achieving and preserving a state of mental harmony. Koreans, more than Americans, permit each other to experience contentment with themselves. For many Koreans, the freedom to experience autochthonous mental states is an inalienable, inviolate, and defensible right. Achievement of them is a cultural ideal, acquired through individually unique arrangements of the self in relation to situations and people, properly embellished with wish-fulfilling self-images that smooth the roughness of reality. When this condition has been achieved, the person's morale is high, his self-esteem is strong, he feels peaceful and secure. In Korea, the feelings, mood, and affective tone that are experienced as a function of all these factors are referred to as one's "kibun." It is a concept which advisors are wisely counseled to study and understand for they can damage or nurture their counterpart's kibun.[18]

Because the kibun represents the mixture between circumstances as observable by others and the inferences that are drawn from them by the individual and his affective reaction to the inferences, other people can either assist or frustrate the attainment of the desired mental state by agreeing or disagreeing with the inferences and wishes. People who facilitate attainment of it may, in time, become regarded as true friends. People who callously ignore the kibun or lack the perspicacity required to correctly understand the inferences and feelings that are being drawn from circumstances will be rejected or may even come to be regarded as enemies. Koreans, of course, do disturb each other's kibun occasionally.

Superiors can, under some conditions, disturb the kibun of their subordinates with less impunity than subordinates can. Thus, if an American advisor appears to feel free to disturb the kibun of his counterpart he is seen as behaving in a manner that implies, among other things, that he feels superior to the counterpart. Acts of this type, perhaps more than any other single class, create a degree of dissonance in the advisor-counterpart relationship that counterparts regard as inexcusable. The joy of having a good kibun requires the cooperation of others, so if one seeks to attain a good kibun, one first learns to select his associates carefully.

Koreans also make fallible judgments, but the observed relations between advisors' descriptions of counterparts' personal traits and the PACT scores they received from them lend credence to the belief that Korean males have developed "nunchi,"[19] or the

[18] For an insightful description of the concept of "kibun" the reader is directed to Paul S. Crane, *Korean Patterns* (16).

[19] Literally "eye measuring," "scenting," and "suspect."

indirect "sizing up" of others, and act upon those inferences to an extent greater than American military personnel.

If advisors seek to establish and develop a continuing relationship to Korean counterparts, they must develop the requisite skills and observe certain rules of conduct designed to safeguard their counterpart's kibun. American society is not geared to produce the kinds of socialization experiences that are required to fulfill these expectations held by counterparts. The demands of an industrialized, mass-production economy together with the development of vast bureaucracies faced with the organization of huge numbers of strangers into efficient work forces has required the suppression of the kibun. The efficient control of large numbers requires the individual to sacrifice his temperament to comply with standardized policies and regulations that were engineered without regard to any particular person's kibun. The material standard of living in such a society can be very high and many are willing to pay the costs, often without awareness of them.

Counterparts, having been socialized under circumstances that make it unnecessary to protect kibun with armor-plate, living under conditions that do not generally offer as much compensation to them for surrender of their kibun as the advisor receives, will continue to resist efforts by advisors to enforce compliance to impersonally derived and administered rules. Attempts to force compliance will produce bruises. The advisor's management of these differences requires skills that training programs may help to develop.

Experiences of this type are probably less important for advisors because they are the *agents* of rejection rather than the *recipients*; they may feel uncomfortable and vaguely uneasy, but they do not feel rejected and angered. Had it been possible to interview the particular advisor who had refused the makkoli the counterpart had purchased and offered to him, his memories of that day might only have included the fishing experiences. For him, the experience may have been unique and, because of its uniqueness and the tour-guide service of the counterpart, engendered a favorable impression of the particular counterpart.

Social interactions occurring under two additional types of conditions remain to be commented upon. Interactions under one of them tend to be mutually facilitative, while the other tends to be mutually inhibitive of the development of cohesion. As was previously noted, advisors who have been invited to their counterpart's home give, and also tend to receive, significantly higher PACT scores than those who have not. This is consistent with the generalizations that: (a) PACT scores tend to register person-specific types of social interactions more than they reflect either the frequency of interactions or social interactions involving Koreans other than a particular counterpart; and (b) they seem to reflect the unique more than the common kinds of person-specific types of interactions.

Again, lack of detailed information hobbles attempts to select between alternate explanations of why person-specific interactions occurring in the counterpart's home should be mutually facilitative while "Other" types have opposite effects upon PACT scores—it can only be conjectured that the interactions within the counterpart's home are approximately equally rewarding to both. Additionally, counterparts probably invite into their homes only those advisors whom they believe are interested in observing a Korean home at first hand and in becoming acquainted with the counterpart's family, and who are unlikely to reject the food, drink, and hospitality offered. Such advisors confirm their counterpart's wish to have reflected to them, by Americans as well as Koreans, that their standards and customs of living are acceptable.

What seems important is that *some* counterparts apparently believe that the risks, costs, and inconveniences potentially resulting from inviting an advisor to their home do not outweigh the immediate and potential rewards. Because they tend to give higher PACT scores after having interacted with the advisor in their home, it is inferred that

their expectations are met. The fact that this seems not to occur in the "Other" conditions may reflect a lack of accurate screening by counterparts of advisors who are likely to accommodate themselves to the indigenous living conditions in an inoffensive way. The difference may reflect the counterpart's greater degree of control in his own home over the foodstuffs and the comforts that are offered to the advisor, adapting Korean customs to accommodate the preferences of his advisor.

Because these experiences tend to mutually facilitate the development of cohesive relations, it would seem justifiable to pursue in greater depth the factors associated with the decisions to invite advisors into their homes. A possible finding might be that counterparts who extend invitations differ from those who do not with regard to factors unrelated to characteristics of the advisors—for example, in rank, wealth, and general standard of living, or with regard to the distance and inconvenience of travel from where the advisor and counterpart work to the counterpart's home. Until more refined and complete comparisons are possible, the present findings can only serve to suggest an area of advisor-counterpart relations that may reward efforts to advance understanding of them—including determining to what extent the personal traits and role behaviors of advisors and counterparts are related to the counterpart's decision.

The second condition, one which may have a mutually inhibitive effect upon the formation of cohesiveness (if it has any effect at all), consists of interactions advisors reported having occurred in U.S. officers' clubs and messes. All but six advisors reported having met with their counterpart under those conditions once or more during the last three months, on an average of about two and one-half times. Because of the relatively high frequency and commonness of the experience, compared to those conditions found significantly related to PACT scores, it would be expected that such meetings would not be significantly related to PACT scores; this is, in fact the case. However, the direction of the effects that these experiences seem to have is sufficiently curious to tempt one to speculate.

Advisors who reported having met with their counterpart under these conditions both give and receive PACT scores that tend to be lower than those given and received by advisors who report not having met with their counterpart under these conditions. While the mean difference between PACT scores received by advisors who did and did not report such meetings is best regarded as zero, a correlation coefficient of $-.29$ ($p<.05$) is obtained between the *number of times* the meetings occurred and the PACT score the advisor received. The correlation between the number of meetings and the PACT scores advisors gave is not significant, but the difference between the means for the two groups yields a $t$ of 1.28 which, while not significant, could have occurred by chance alone about 10% of the time (one-tail test).

This finding, coupled with the low but significant negative correlation between the number of such interactions and the PACT scores advisors received, makes one hesitant to conclude that these interactions simply have no effect upon PACT scores. Admittedly, if a new sample of advisors and counterparts were surveyed, this relationship might evaporate. Compared to the types of conditions that have been found significantly associated with PACT scores, meetings in U.S. officers' clubs and messes may tend to differ. While lack of information about these interactions precludes empirical tests of alternate explanations, conjecture based upon limited personal observation indicates what types of information are needed.

It is the author's impression that many of the interactions at clubs and messes, depending upon the particular geographical location of the advisors and counterparts, occur during "on-duty" periods, especially lunch time, and reflect decisions based upon convenience. Thus, the decision to spend time together under those conditions probably reflects few of those factors that enter into the development of a willingness or

unwillingness to continue working together for a large majority of advisors and counterparts.

Moreover, it is the author's impression that the interactions that do take place within the clubs, but more especially the messes, are less person-specific types of interactions than those occurring under other conditions. Ordinarily, tables within the messes accommodate four or more persons and are usually occupied. Thus, the interactions between the specific advisors and counterparts whose PACT scores are the basis of the present analyses were determined, in part, by others seated at the table.

Interactions that occur in the clubs may or may not be similar, and allowance needs to be made for the possibility that they are different. Any future efforts to determine whether interactions under these conditions have any effects upon PACT scores should allow for separate analyses of club interactions.

Present data are adequate only in the sense that they tend to suggest that interactions under these conditions are not productive, and may be counterproductive, of cohesiveness. If they are counterproductive, it would seem justifiable to attempt to achieve a better understanding of what specific components of the conditions have these effects.

### Biographical Characteristics

This section presents the results of tests performed to determine whether PACT scores register variations among advisors and counterparts with regard to certain biographical characteristics. Both groups provided information on their current status (e.g., age and rank) as well as on a number of historical features (e.g., time spent in the United States and previous advisory duty) of a biographical nature. PACT scores that advisors and counterparts received or gave were tested for possible relationships to these characteristics in order to determine which, if any, must be considered in interpreting the meaning of those scores. The general question to which these tests were addressed was, "To what extent, if any, do PACT scores reflect characteristics of advisors and counterparts that are consistent or inconsistent with an interpretation of them as estimates of their willingness to continue working together?"

The 17 biographical characteristics that were tested are listed in Table 17 in approximately ascending order of the probability that the results associated with the PACT scores counterparts received could have occurred by chance alone. Each characteristic is, additionally, ranked approximately in terms of the probability that it has no effect upon the PACT scores advisors received.

Comparison of the position that each characteristic has in relation to the PACT scores advisors and counterparts received indicates that there is very little agreement. The comparison is, however, meaningless because none of the 17 characteristics that were tested for relationships to PACT scores advisors received yielded statistically significant results. Only two characteristics (C1, an attribute of advisors, and 2, of counterparts) yield results that even approach statistical significance.[20] Although it is possible to conceive of them as having a common element, their effects upon the PACT scores, if any, tend to be in opposite directions.

For example, the six advisors who reported (C1) having had one or more previous MAP assignments received, on the average, a PACT score of 12.7 in contrast to a mean of 16.7 received by the 46 advisors who reported not having had such previous experience. On the other hand, the 36 counterparts who reported (C2) having attended school in the United States gave their advisors a mean PACT score of 16.6, in contrast to the mean of 12.2 given by the five counterparts who reported not having been schooled in the U.S.

[20] Given the present sample sizes, had a one-tail test of significance been used, these results could have occurred by chance alone about 10% of the time as estimated by the Cochran-Cox $t$ test.

Table 17

## PACT Scores Tested for Relations to Biographical Characteristics

| Ranked Importance | | Characteristic | Questionnaire Source |
|---|---|---|---|
| Counterpart Received | Advisor Received | | |
| A1[a] | (C3)[b, c] | Whether or not advisor had non-MAAG experience advising foreign nationals. | ATOQ 9 |
| A2[a] | (C1)[c] | Whether or not advisor had had prior MAP assignments. | ATOQ 8 |
| (A3)[a, c] | C9 | Whether or not counterpart held the rank of lieutenant colonel. | ABI-V-1 |
| (A4)[a, c] | C16 | Whether or not advisor held the rank of major. | ATOQ 2 |
| A5 | C10 | Advisor's age. | ATOQ 3 |
| A6 | C5 | Advisor's total months experience working with foreign nationals. | ATOQ 10 |
| A7 | C15 | Whether or not advisor was accompanied by dependents in KMAG. | MAPAQ 17a |
| A8 | C4 | Whether or not counterpart had ever been in the United States. | ABI-V-6 |
| A9 | C2 | Whether or not counterpart had ever attended school in the United States. | ABI-V-8 |
| A10 | C14 | Number of months advisor expects to remain in KMAG. | ATOQ 7b |
| A11 | C13 | Number of months counterpart spent in school in United States. | ABI-V-9 |
| A12 | C6 | Total number of KMAG advisors with whom counterpart has worked. | ABI-V-11 |
| A13 | C7 | Counterpart's age. | ABI-V-2 |
| A14 | C8 | Number of months advisor had completed on current tour of duty in KMAG. | ATOQ 7a |
| A15 | C11 | Number of months counterpart spent in USA. | ABI-V-7 |
| A16 | C12 | Total number of months counterpart has had KMAG advisors assigned to him. | ABI-V-10 |
| A17 | C17 | Advisor's KMAG organizational element. | ABI-II-3 |

[a]Characteristics that yield significant differences between PACT scores.
[b]None of the characteristics tested yielded significant differences.
[c]( ) indicates an inverse relation between size of PACT score and score derived from the characteristic.

Because similar characteristics (C3, 4, 5, 6, 11, 12, 13) are found unrelated to the PACT scores advisors received, the most tenable conclusion appears to be that these characteristics of advisors and counterparts need not be considered when attempting to define the meaning of these PACT scores.

Evidence indicative of relations between biographical characteristics of advisors and counterparts and the PACT scores counterparts received was obtained from four of the 17 tests performed. Three of the characteristics are attributes of advisors, only one of counterparts. In general, it appears that advisors who have had the experience of advising foreign nationals prior to their present assignment in KMAG give significantly higher PACT scores to their counterparts than those who have not had this type of military experience. The 10 advisors, for example, who reported (A1) having had non-MAAG type of experience advising foreign nationals gave a mean PACT score to their counterparts of 19.8 in contrast to the mean of 17.0 given by advisors who reported not having had this kind of experience (Cochran-Cox $t$, $p<.01$). Second, the five advisors who reported (A2) having had prior MAP experience gave a mean PACT score to their counterparts of 19.5 in contrast to a mean of 17.3 given by the 45 advisors who reported not having had this kind of experience (Cochran-Cox $t$, $p<.01$).

Although these tests indicate that past experience similar to the advisors' present KMAG assignments tends to facilitate their willingness to continue working together, it should be noted that similar characteristics do not. For example (A6), while a correlation coefficient of +.33 is obtained between the number of months of experience that experienced advisors have had working with foreign nationals and the PACT scores they gave to their counterparts, the coefficient, based upon only 15 advisors, is not significantly different from zero. Nor (A14) is a significant relation observed between the number of months the advisor has completed on his present tour in KMAG and the PACT score he gives to his counterpart. Thus what seems to make a difference is not the amount of experience the advisor has had, but rather whether he has had any similar kinds of experience. It is unknown whether these experienced advisors were selected because of outstanding work in previous advisory assignments or if they simply represent an unselected sample of experienced advisors. Interpretation of the PACT scores in terms of this finding depends upon knowing which of these alternatives is generally true.

Present evidence indicates that military rank, or unknown factors associated with it, tends to have an effect upon the PACT scores counterparts receive. Two lines of evidence converge to support this conclusion. First, counterparts who reported (A3) holding the rank of lieutenant colonel received a mean PACT score of 11.6 which is significantly different (Multiple Range Test, $p<.05$) from mean PACT scores received by counterparts holding all other ranks. Those PACT scores ranged from 16.4 for counterparts with the rank of major to a mean of 20 received by the three major generals included in the study. Second, advisors who reported (A4) holding the rank of major gave to counterparts a mean PACT score of 14.7 which is significantly different (Multiple Range Test, $p<.05$) from the mean PACT scores associated with all other ranks. Those mean PACT scores ranged from 17.1 given by captains to 19.3 given by colonels. Since it seems probable that advisors with the rank of major most likely were judging counterparts with the rank of lieutenant colonel, the evidence is consistent in identifying advisors with the rank of major as being less willing to continue working with their counterparts than advisors holding other ranks.

Obviously, no causal or other kind of relationship exists between the type of rank insignia that an advisor wears and his willingness to continue working with counterparts. The specific component associated with being a major that influences the PACT scores counterparts receive is unknown. While it is conceivable that the "causal" component is a factor associated with having a counterpart with the rank of lieutenant colonel, the relation cannot be demonstrated or clarified with presently available data. Additional information is needed to determine whether this finding is replicable as well as to select between alternate interpretations of the finding.

Except for previous experience advising foreign nationals, and something associated with the rank of major, the PACT scores received by both advisors and counterparts are

free from influence by the remaining 13 biographical characteristics of advisors and counterparts that were tested. Neither the advisor's nor the counterpart's age (A5-C10) seems to have an effect. Whether the advisor is or is not (A7-C15) accompanied by dependents in KMAG influences neither the PACT score he receives nor the score he gives. The advisor's (A17-C17) organizational element or unit membership appears to influence neither, although the mean PACT scores advisors gave ranged from a low of 15.2 in one unit to a high of 19.5 in another. PACT scores advisors received ranged from a low of 11.5 in one unit to a high of 18.3 in another. With the possible exception of C1, PACT scores given and received seem uninfluenced by whether the counterpart has (A8-C4) ever been to the United States, (A9-C2) whether he attended school there, and (A'5-C11) the total number of months spent in the States and (A11-C13) in school.

Results obtained from the analysis of social interaction characteristics indicated the importance of person-specific factors as determinants of the PACT scores. Present results, obtained from the analysis of biographical factors, tend to support the previous conclusion. PACT scores are uninfluenced by (A12-C6) the total number of advisors with whom the counterpart has worked in the past and (A16-C12) the total number of months over which he has had advisors assigned to him. Similarly, PACT scores are uninfluenced by (A14-C8) the total number of months the advisor has completed on his current tour of duty in KMAG. Thus, all of these extraneous, non-person-specific factors may be excluded from interpretation of the meaning of the PACT scores.

## Conclusions

PACT scores advisors and counterparts received were largely found to be unrelated to the types of biographical characteristics tested in this study. This observation illustrates one of the merits of the method. While it is conceivable that all 17 characteristics tested may contribute to the development of cohesive advisor-counterpart relations, the finding that none have significant effects upon the PACT scores advisors received and that only two appear to influence the PACT scores counterparts received greatly simplifies definition of the meaning of the scores.

The ability of the PACT scores to discriminate between experienced and inexperienced advisors tends to add to the probable validity of the method. Yet, the failure of this difference to affect the PACT scores received from counterparts raises questions. Indeed, present data suggest that counterparts are less likely to express a willingness to continue working with advisors with prior experience advising foreign nationals or who have had previous MAP assignments. Why this should be is unclear, but if the finding can be replicated it should be of interest to those with responsibility for selecting, assigning, training, and managing advisors. If the PACT method has the validity that past analyses have suggested, then with regard to this finding it may have served a potentially useful diagnostic function.

Much the same can be said of the finding that advisors with the rank of major tend to give significantly lower PACT scores and counterparts with the rank of lieutenant colonel tend to receive significantly lower PACT scores. Exactly what PACT scores are registering about these personnel is unknown in the light of available information. The present diagnosis must be tentative, subject to independent confirmation and, if upheld, preferably explained on the basis of empirically established relations to observations relevant to testing the tenability of alternate explanations.

## SUMMARY OF FINDINGS

Major findings from the study concerning both methodological and substantive results are briefly described below. In order to better evaluate and understand the conclusions, results concerning the reliability of the PACT scores, and the extent to which they are reciprocated, and the results of various approaches assessing their validity are first described. Social interaction characteristics and biographical characteristics of advisors and counterparts found related or unrelated to the PACT scores are then listed.

### RELIABILITY OF THE PACT SCORES

Estimates of the reliabilities of the distributions of PACT scores advisors and counterparts gave to one another both yield coefficients of .95, thus indicating (a) an extremely high degree of consistency in the responses given to the 20 items in each form, and (b) no difference between advisors and counterparts in this characteristic.

### RECIPROCATION OF THE PACT SCORES

Approximately two-thirds of the advisors and counterparts, under completely independent circumstances, expressed roughly equal degrees of willingness to continue working with each other. Most of the two-thirds indicated a willingness, with only about 6% expressing an unwillingness to continue working together. About 35% of the pairs of advisors and counterparts did not, even roughly, share the same level of willingness or unwillingness to continue working together.

### VALIDITY OF THE PACT SCORES

In this section, the major results obtained from several different approaches to the assessment of the PACT score validities are discussed.

#### Content Validity

Factor analyses of the item intercorrelations within each of the PACT forms yield a single unrotated factor upon which the median item loads to the extent of .78 for advisors and .76 for counterparts. The first unrotated factor extracted from each matrix of intercorrelations accounts, in both the advisor and counterpart forms, for more than 50% of the variance. Factor scores derived from only the first rotated factor account, in both the advisor and counterpart forms, for approximately one-third of the total raw PACT score variance.

The second rotated factor from the advisor's form and the third rotated factor from the counterpart's form each accounts for roughly an additional one-third of the total raw PACT score variance. Indices of factorial similarity between the three pairs of rotated factors correlating most highly with the PACT scores are all positive and range from .65 to .83. Examination of the literal characteristics of the items defining each of the several major factors yields evidence that affirms the research objective of sampling variations

between advisors and counterparts with regard to their willingness to continue working together. Comparison of the factors extracted from the advisor's and counterpart's forms yields evidence indicative of highly similar contents.

### Construct Validity

Factor analyses of the advisors' and counterparts' Interpersonal Attraction matrices, each based upon 38 trait scales, yield three major factors each. Indices of factorial similarity indicate the two sets of factors are substantially similar in content. Advisors' and counterparts' first factors are both descriptive of the rater's evaluation of his co-worker's competence, industriousness, and productivity. The counterparts' first factor includes, in addition, judgments related to several facets of their current advisor's character.

The character traits most salient to counterparts' evaluations of advisors include his trustworthiness, sincerity, and ability and motivation to establish and maintain harmonious interpersonal relations to them. Advisors, more than counterparts, appear to compartmentalize or treat in a discrete fashion the task and social types of competencies of co-workers, while counterparts tend to give more holistic types of descriptions of advisors. Factor scores computed from the advisors' first rotated factor correlate .30 with the PACT scores they gave to counterparts. Factor scores computed from the counterparts' first rotated factor correlate .73 with the PACT scores they gave to advisors. None of the factor scores computed from the two remaining pairs of rotated factors yield coefficients that account for as much as 10% of the PACT score variance.

Estimates of advisors' and counterparts' interpersonal attraction, based upon comparisons between descriptions of actual co-workers and their conceptions of most- and least-preferred kinds of co-workers, correlate significantly with the PACT scores they give to their current co-workers. Specifically, (a) the more an advisor judges his current counterpart to be different from his conception of a most-preferred American co-worker, the less likely he is to give that counterpart a high PACT score, and (b) advisors' conceptions of either a most- or least-preferred Korean co-worker have no demonstrable effect upon the PACT scores they give to their current counterparts, nor do their conceptions of a least-preferred American co-worker.

However, (c) advisors who judge their current counterpart to be very different from their conceptions of either a most-preferred American or Korean co-worker are less likely to receive from their counterparts high PACT scores, and (d) advisors who judge their current counterpart to be very different from their conception of a least-preferred American co-worker are, on the average, more likely to receive from their counterparts a high PACT score.

PACT scores that counterparts give to advisors vary as a function of how similar they judge their advisor to be relative to their conceptions of most- and least-preferred Korean co-workers, but not relative to their conceptions of American co-workers defining those types. Specifically, (e) the most highly significant result to emerge from this analysis indicates that counterparts who view their advisor as differing greatly from their conception of a most-preferred Korean co-worker tend, on the average, to give lower PACT scores to those advisors. Conversely, (f) counterparts who view their current advisor as differing greatly from their conception of a least-preferred Korean co-worker, but not American, tend, on the average, to give higher PACT scores to their advisors.

Finally, (g) whereas advisors' descriptions of the personal traits of counterparts were found related to the PACT scores counterparts gave to them, no significant relations are observed between how favorably or unfavorably counterparts described the personal traits of their advisors and the PACT scores advisors gave to their counterparts.

The construct validity of the PACT method was additionally assessed by determining whether the scores derived from it varied as a function of advisors' and counterparts' satisfaction with the ways in which they enacted their respective roles. As groups, advisors and counterparts are remarkably similar in terms of proportions of role behaviors with which they were or were not satisfied. Advisors and counterparts appear satisfied with an average of nearly three-fourths of the role behaviors against which they judged one another. Advisors and counterparts are highly similar in that both groups judged about 13-14% of the behaviors to occur more often, and an equal percentage to occur less often, than desirable.

Seven of the eight tests relating PACT scores to critical role behaviors yielded results that confirmed predictions based upon the assumed validity of the method and the effects of role performance upon cohesiveness. It was found that PACT scores counterparts gave to advisors correlated (a) +.60 with the percentage of advisory critical role behaviors they judged to occur as often as desirable, (b) −.64 with the percentage of advisory critical role behaviors they judged should occur more than was typical, (c) −.47 with the percentage of advisory critical role behaviors they judged should occur less often than was typical, and (d) −.61 with the total percentage of combined behaviors they judged should occur either more or less often than was typical. All four of the coefficients are significantly different from zero ($p<.01$).

Three of the four tests relating PACT scores advisors gave to counterparts to their evaluations of the adequacy with which their counterparts enacted their roles were found significantly different from zero ($p<.01$). It was found that PACT scores advisors gave to counterparts correlated (a) +.41 with the percentage of counterpart critical role behaviors they judged to occur as often as desirable, (b) −.50 with the percentage of counterpart critical role behaviors they judged should occur more often than was typical, and (c) −.40 with the total percentage of combined behaviors they judged should occur either more or less often than was typical. The coefficient of −.27 observed between the PACT scores advisors gave and the percentage of counterpart critical role behaviors that they felt should occur less often than was typical is not significantly different from zero.

It was also found that counterparts' expressions of satisfaction and dissatisfaction with their advisors' critical role behaviors were significantly related to the PACT scores they received from their advisors. Correlations between the two sets of scores yield moderate coefficients that all are significantly different from zero ($p<.05$). For example, it is observed that the PACT scores counterparts received were correlated (a) +.34 with the percentage of advisory behaviors they judged to occur as often as was appropriate and desirable, (b) −.31 with the percentage of advisory behaviors they judged should occur more often than was typical, (c) −.29 with the percentage of advisory behaviors they judged should occur less often than was desirable, and (d) −.33 with the percentage of more and less often behaviors combined. Parallel relationships were observed between the PACT scores counterparts gave to their advisors and their advisors' expressions of satisfaction and dissatisfaction with them concerning counterpart critical role behaviors. However, none of the relationships are, given the present sample size, significantly different from zero at the .05 level.

### Criterion-Related Validity

PACT scores advisors gave to counterparts were found related to the following characteristics of the work in which they engaged:

(1) Source of information judged by the advisor to have been most important in his decision to make the changes recommended to his counterpart. It appears that advisors with the greatest freedom of choice in selecting and defining the changes that would be attempted gave, on the average, higher PACT scores to counterparts than advisors who had less autonomy.

(2) Frequency advisor reports having met with counterpart to effect the changes he sought. In general, advisors who reported having met with their counterpart two to three times per week or more gave, on the average, higher PACT scores than advisors who reported meeting the counterpart less often.

(3) Percentage of duty time advisor devoted to advisory work. A moderate, but statistically significant, correlation is observed between this characteristic of the advisor's job and the PACT score he gave to his counterpart.

(4) Number of hours advisor reported spending with counterpart during last month for official business. A low, but statistically significant, relationship is observed between this characteristic and the PACT score he gave to his counterpart.

(5) Length of time progress toward accomplishing the changes the advisor sought was delayed by obstacles. Advisors who reported delays of more than one month tended, on the average, to give lower PACT scores to their counterparts than those who reported shorter delays.

(6) Advisor's reported satisfaction with the progress that had been made toward accomplishing the changes he sought. In general, advisors who reported some degree of satisfaction with the progress tended, on the average, to give higher PACT scores to their counterparts than advisors who reported some degree of dissatisfaction.

(7) Advisor's evaluation of his counterpart's general military competence. Advisors who judged that less than 40% of American officers could excel their counterpart's general level of military competence gave above-average PACT scores more frequently than advisors who judged their counterparts could be excelled by 60% or more of American officers.

PACT scores advisors gave to their counterparts were found unrelated to the following characteristics of the work in which they were engaged:

(1) Advisor's judgment concerning his primary role concerns. PACT scores advisors gave to their counterparts appear not to have been significantly influenced by whether they were primarily concerned with (a) monitoring their counterpart's participation in the MAP, (b) procuring funds, supplies, materials, and so forth, for consumption by the counterpart, (c) providing technical know-how on the acquisition, storage, use, maintenance, and/or disposal of equipment or supplies, or (d) developing or modifying plans, policies, and regulations.

(2) Advisor's estimate of the degree to which he and his counterpart were in agreement, from the start, concerning the desirability of making the changes recommended by the advisor.

(3) Advisor's judgment of whether ROKA, KMAG, or both had primary responsibility for the obstacles that were encountered.

(4) Advisor's judgment of the relative amount of work done by his counterpart and ROKA to effect the changes he had recommended.

(5) Advisor's judgment of how well his counterpart managed his subordinates.

(6) Whether the changes the advisor had recommended had been accomplished.

(7) Advisor's estimate of the total number of hours he had devoted to working on making the changes he had recommended.

(8) Advisor's estimate of the total number of hours he had spent in face-to-face contact with his counterpart to effect the changes he had recommended.

PACT scores counterparts gave to advisors were found related to the following characteristics of the work in which they engaged:

(1) Counterpart's beliefs about the primary concerns of his advisor. Counterparts who regarded their advisors as being primarily concerned with monitoring requests from ROKA or ROKA's use and/or disposal of U.S. funds, supplies, and/or equipment gave significantly lower PACT scores to those advisors than counterparts who regarded their advisor as being primarily concerned with other matters.

(2) Average frequency per month the counterpart reported having met with his advisor to conduct official business. Counterparts who reported having met with their advisor two to three times per week or more gave above-average PACT scores more frequently than counterparts who reported having met with their advisors less often.

(3) Percentage of duty time counterpart spent on matters other than meeting with advisors, administration, and training troops. A trend was observed for those counterparts who reported devoting greater percentages of their time to matters other than meeting with advisors to give somewhat lower PACT scores to them.

(4) Adequacy of the frequency with which advisor is reported to have met with counterpart for business. Counterparts who indicated that their advisor had not met with them often enough to accomplish their business gave significantly lower PACT scores to their advisors than counterparts who judged the frequency of meetings to have been adequate.

(5) Advisor's estimate of his counterpart's initial agreement with him concerning the desirability of making the changes he had recommended. Advisors who indicated that they and their counterpart had been in agreement from the beginning concerning the desirability of making most or all of the changes the advisor sought tended to receive higher PACT scores from their counterparts than advisors who indicated fewer degrees of agreement.

(6) Advisor's opinion concerning the effectiveness with which his counterpart participated in effecting the changes he had recommended. Advisors who judged their counterparts to have been very effective tend to receive from them higher PACT scores than advisors who regarded their counterparts to have been less effective.

(7) Advisor's evaluation of his counterpart's general level of military competence. Advisors who regard their counterpart as competent or more competent than the average U.S. Army officer receive significantly higher PACT scores from them than advisors who regard their counterparts as less competent.

PACT scores counterparts gave to their advisors were found unrelated to the following characteristics of the work in which they were engaged:

(1) Percentage of total duty time the counterpart reports spending in meetings with KMAG advisors.

(2) Percentage of total duty time the counterpart reports spending on ROKA administrative matters.

(3) Percentage of total duty time the counterpart reports spending in training ROKA troops.

(4) Total number of months the counterpart reports having worked with the advisor.

(5) Counterpart's estimate of how helpful the advisor has been in matters not concerning his role in obtaining MAP materials and funds.

(6) Counterpart's impression of how much initiative the advisor takes in enacting his advisory role.

(7) Counterpart's estimate of the amount of time and effort he has had to devote to getting KMAG concurrences.

### Social Interaction Characteristics

PACT scores advisors gave to their counterparts were found related to the following social interaction characteristics (Table 16):

(1) Advisors who reported having interacted socially with their counterpart once or more during the preceding three months under conditions not described in the questionnaire gave, on the average, a significantly higher PACT score to their counterpart than advisors who did not report these kinds of interactions. Social interactions

associated with higher PACT scores included trips to visit Korean religious and historical sites, shopping trips, beach parties, joint attendance at movies, interactions in ROKA officers' club and messes, and office parties.

(2) Advisors who reported having engaged in sports with their counterpart once or more during the preceding three months gave, on the average, higher PACT scores than advisors who reported not having engaged in sports.

(3) Advisors who reported having been invited to their counterpart's home once or more during the preceding three months gave, on the average, higher PACT scores than advisors who reported not having been to their counterpart's home.

PACT scores advisors gave to their counterparts were found unrelated to the following social interaction characteristics:

(1) Number of invitations advisor reported having *received* during the last month to be a guest of members of ROKA.

(2) Number of invitations the advisor reported having *accepted* during the last month to be a guest of members of ROKA.

(3) Counterpart's desire for a change in the frequency of social interaction with the advisor from that which has been typical of an average month.

(4) Advisor's report of the total number of social interactions he has had with his counterpart, under all kinds of conditions, during the last three months.

(5) Counterpart's report of how often during an average month he interacts socially with his advisor.

(6) Whether the advisor reported having met with his counterpart once or more in a local restaurant during the preceding three months.

(7) Whether the advisor reported having met with his counterpart once or more in a U.S. officers' club or mess during the preceding three months.

(8) Whether the advisor reported having regularly scheduled social or recreational activities with one or more members of ROKA, their families and friends.

(9) Whether the advisor reported having interacted with his counterpart in the advisor's home once or more during the last three months.

(10) Advisor's report of the number of members of ROKA, their families and friends who have been guests of the advisor during the last month.

(11) Advisor's report of the number of invitations accepted from Korean civilians during the last month to be their guest at a social function.

(12) Advisor's report of the number of invitations received from Korean civilians during the last month to be their guest at a social function.

Although PACT scores counterparts gave to advisors were found unrelated to any of the 12 social interaction characteristics listed above, comparison of the *direction* of the effects they have upon these PACT scores shows that in about 80% of the characteristics the effects are in the same direction. Three types of social interactions were tentatively identified as having possibly opposite effects upon the PACT scores advisors and counterparts gave to each other.

### Biographical Characteristics

PACT scores advisors gave to counterparts were found significantly related to three biographical characteristics of advisors and to one characteristic of counterparts.

Advisors who reported having had the following kinds of previous experience gave, on the average, higher PACT scores to their counterparts than advisors who reported not having had the experiences.

(1) Previous military assignments (non-MAAG) that involved the advising of foreign nationals.

(2) Previous military assignments involving the Military Assistance Program.

Advisors who reported having the following biographical characteristic gave significantly lower PACT scores and counterparts who reported having the following biographical characteristic received significantly lower PACT scores than those who reported not having the characteristic:

(1) Advisors with the rank of major gave, on the average, significantly lower PACT scores than advisors holding other ranks.

(2) Advisors whose principal counterpart held the rank of lieutenant colonel gave significantly lower PACT scores than advisors whose principal counterpart held some other rank.

PACT scores that counterparts gave to advisors were not found significantly related to any of the above biographical characteristics.

The following biographical characteristics were not found significantly related to either the PACT scores advisors gave or to the PACT scores counterparts gave:

(1) Advisor's chronological age.
(2) Advisor's total months' experience working with foreign nationals.
(3) Whether the advisor reported having been accompanied by dependents while serving as a KMAG advisor.
(4) Whether the counterpart had ever been to the United States.
(5) Whether the counterpart had ever attended school in the United States.
(6) Number of months advisor expected to remain in KMAG at the time the survey was conducted.
(7) Number of months counterpart reported having spent in school in U.S.
(8) Total number of KMAG advisors with whom the counterpart reports having worked.
(9) Counterpart's chronological age.
(10) Total number of months the advisor reported having completed on his present tour of duty in KMAG at the time of the survey.
(11) Total number of months counterpart reported having spent in U.S.
(12) Total number of months the counterpart reported having had KMAG advisors assigned to work with him.
(13) Advisor's KMAG organizational element.

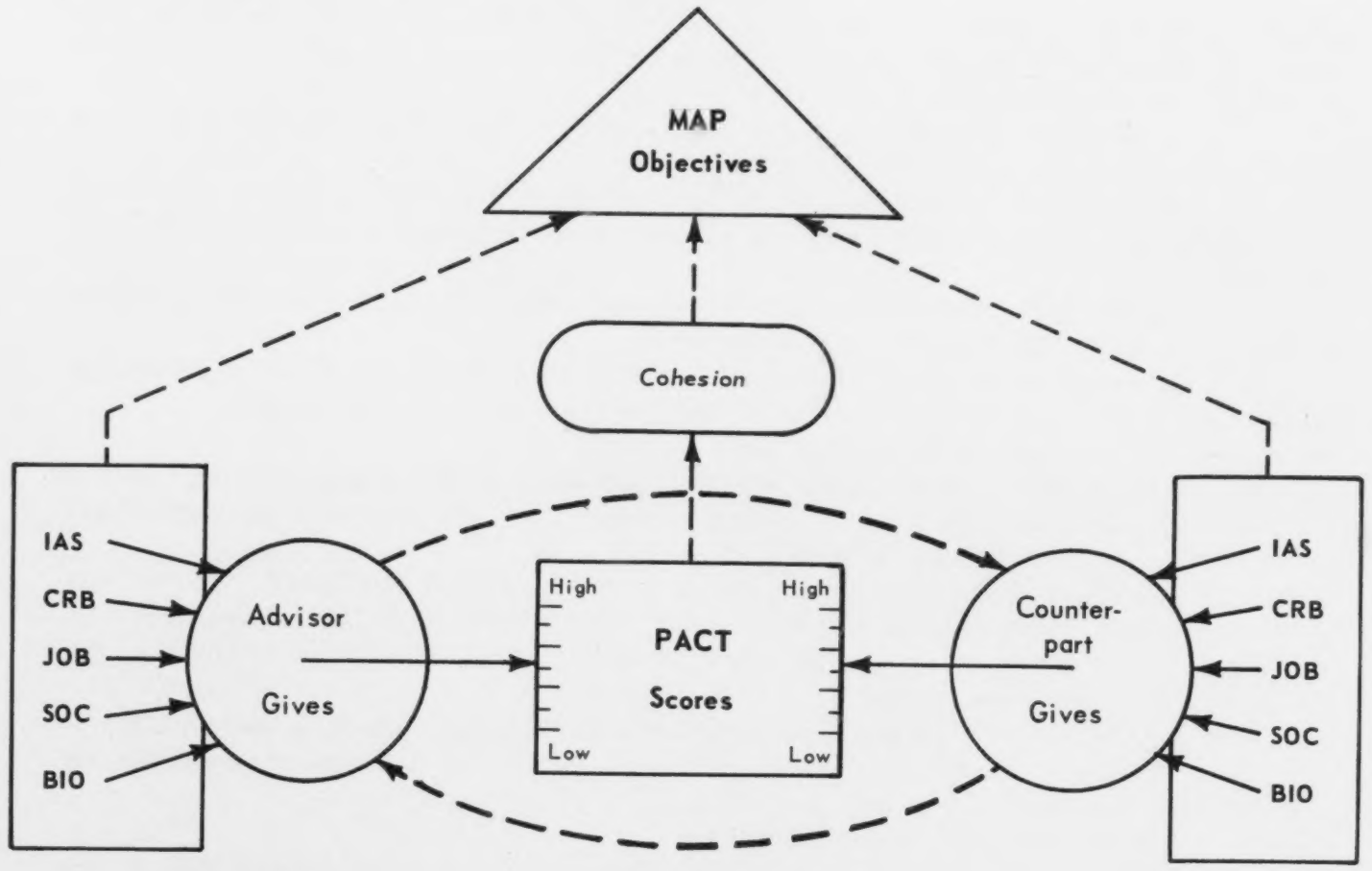
## DISCUSSION

It is useful to review and relate some of the major findings to two broad categories, the first of which is comprised of questions pertaining to the method. They have in common an inquiry concerning the extent to which the findings from the method approximate the specifications set forth in the development of it. The second category is comprised of questions pertaining to the operational implications of the results obtained, so attempts to answer them depend to a great extent upon the outcome of efforts to answer the first set.

## METHODOLOGICAL IMPLICATIONS

Not all questions of interest to the present study can be answered by reference to observed relations or to inferences based upon them. The distinction between questions on which answers can or cannot be attempted by appeal to observed relations has been illustrated in Figure 5. Solid lines represent observed relationships and dashed lines represent relationships as yet unobserved.

**Distinction Between Observed and Unobserved Relations**




Legend:

IAS = Interpersonal Attraction Score
CRB = Critical Role Behavior Score
JOB = Job Characteristics
SOC = Social Interactions
BIO = Biographical Characteristics
—— = Observed Relations
--- = Relations as yet Unobserved

Figure 5

Observed relations provide a basis from which to judge the extent to which four of the five original specifications were achieved. First, the research approach adopted to develop a conception and method with which to obtain estimates of proficiency has been demonstrated to be a *feasible* one. The conception of proficiency that was advanced led to the development of a method that was applicable to the collection of information from advisors and counterparts who were currently working together. Thus, whether judged in terms of the capacity of the conception of proficiency to generate data collection procedures or the acceptability of the procedures to KMAG and ROKA, the approach is feasible.

Second, the conception and method are *informative* in the sense that they have generated a type of information about the nature of advisor-counterpart relations never before collected. The author is unaware of any other study in which pairs of currently interacting advisors and counterparts described one another, in a form amenable to the kinds of analyses performed here, with regard to the types of characteristics examined in this study.

Third, on the whole, the conception of proficiency that was advanced appears to yield estimates that are *equitable*. Estimates of proficiency do not, for example, appear to vary as a function of many characteristics of advisors and counterparts over which they have no control. Characteristics such as age, length of time in KMAG, presence or absence of dependents in the command, and others are not registered by PACT scores. However, a few characteristics over which advisors do not have control, or have limited control, are registered by PACT scores. For example, PACT scores tend to discriminate between experienced and inexperienced advisors, between those who are regarded as being primarily concerned with monitoring their counterpart's participation in the MAP from those seen as having other kinds of primary concerns, and between the ranks of advisors and their counterparts.

Whether these differences result in invidious or equitable comparisons depends more upon how the information is subsequently used than upon the nature of the observation that is obtained by means of the PACT method. Given the nature of the kinds of characteristics that are registered by PACT scores, these differences are probably best regarded as diagnostic of attributes of advisors and counterparts that need to be considered in efforts designed to promote proficiency.

Fourth, several of the results demonstrate the *transactional* nature of the information obtained by use of the method. For example, PACT scores advisors give to counterparts tend to be related to counterparts' judgments of certain of the advisors' critical role behaviors. Moreover, PACT scores counterparts give to advisors are related to how approvingly advisors judge them with regard to their personal traits, general military competence, and the effectiveness with which they participated in effecting the changes the advisor had recommended.

Additionally, PACT scores are transactional in the sense that they reflect the effects of several types of social interactions that advisors report having had with counterparts and, to a lesser degree, vice versa. That some of the effects are inclined to be in opposite directions is understandable, if not yet really understood, in terms of the transactional nature of advisor-counterpart relations. Observed relationships, therefore, indicate that four of the five original specifications were at least roughly attained. Since an evaluation of the *relevance* of the concept and method to the MAP involves both observed and inferred relationships, the last specification is best discussed following a more detailed review of several other methodological matters.

Three basic questions concerning the PACT method need to be discussed before drawing any conclusions concerning its potential utility in an operational context:

(1) To what extent is it likely that the relationships observed in this study can be repeated?

(2) To what extent can estimates of proficiency obtained from the PACT method be meaningfully substituted for direct observation of advisor-counterpart interactions?

(3) To what extent does the present evidence support an interpretation of the PACT scores as a measure of cohesiveness and how relevant is this as an influence upon the extent to which the basic objectives of the MAP are or can be met?

The coefficients of reliability obtained from analyses of the two distributions of PACT scores indicate a high degree of replicability within the items constituting the PACT Checklists. On the basis of the estimates of internal consistency and the contents of the factors extracted, each item within the two forms of the checklist appears to be sampling approximately the same characteristics as the other items, thus demonstrating replicability in the sense of repeated sampling at a particular time.

Replicability, in the sense of stability over time, has yet to be studied. Because PACT scores are sensitive to differences among and between advisors and counterparts, any systematic changes in those characteristics should alter the distributions of PACT

scores. For example, if advisors in a different MAAG were perceived by counterparts to be exclusively concerned with monitoring their participation in the MAP, present observations suggest the average PACT score should be lower. If, on the other hand, interactions were of a type that led counterparts to invite a larger proportion of advisors into their homes, the average PACT scores given to counterparts should increase. Thus, replicability, in the sense of stability over time, should be expected of PACT scores only to the extent that factors known to be associated with them remain as they were at the time this study was conducted.

If changes over time can be demonstrated to vary as a function of factors previously observed and found related to the scores obtained, then possible lack of replicability (stability) should be regarded as one of the merits of the method. PACT scores are probably unstable in the same sense that functioning barometers are also unstable over time.

Are PACT scores reasonably good substitutes for direct observation of advisor-counterpart interactions? The question may unintentionally imply that participant observation on a scale of the type used in this study is feasible and in some ways a more desirable way of collecting information. It is the author's opinion, however, that participant observation is a method best suited to the development of hunches and hypotheses concerning phenomena, but quite unsuited to the job of testing hypotheses. The basic question, however, is not the advantages and disadvantages of alternate ways of acquiring information about advisor-counterpart relationships; more fundamental is the need to assess the extent of differences between impressions and conclusions drawn from personal observation and those reached by means of the PACT method.

Military personnel experienced in advising foreign nationals often delineate the personal qualifications required by those assignments as patience, tact, emotional stability, and professional competence (17). The statistical factors extracted from counterparts' use of the IAS to describe their current advisors tend to substantiate these reports. Counterparts' expressions of willingness to continue working with advisors are substantially related to how favorably they rate the personal traits of their advisor. While the three factors that were extracted, when combined, account for about 62% of the variance among the PACT scores advisors received, one factor alone accounts for 33% of the variance. The traits loading most highly on that factor are: *trustworthy*, *enthusiastic*, *competent*, *harmonious*, *thoughtful*, and *sincere*.

Whereas patience and tact imply lack of congruence between what advisors expect of counterparts and what counterparts believe, expect, and do, the traits that appear important in the formation of their willingness to continue working with advisors imply that the advisor is generally in sympathy with what they believe, expect, and do. More than patience and tact, the traits most highly related to PACT scores appear to reflect counterparts' wishes for advisors who will serve them as personal mentors. While some overlap is observed between the kinds of personal qualities that advisors regard as important to the performance of the advisory role and those that counterparts use to form their judgments concerning their willingness to continue working with advisors, the overlap is not complete.

Patience and tact have often been recommended to advisors as though they were antidotes to what has appeared to Western observers as hypersensitivity among Asian counterparts. If personal experience with counterparts has given advisors the impression that Asians are hypersensitive, does the PACT method yield similar conclusions? Although it was not one of the objectives of this study to determine whether there are any differences between Americans and Koreans with regard to level of sensitivity, some data are available with which to make relevant comparisons. The comparisons all take a similar form, that is, are the advisor's evaluations of his counterpart related to his counterpart's evaluation of him and vice versa?

The evidence bearing upon this question has already been cited in the section on assessing the transactional nature of the PACT method, in which it was reported that advisors' evaluations of their counterparts are related to the PACT scores counterparts give to them. With regard to comparative evaluations involving their personal traits, counterparts seem somewhat more influenced than do American military advisors, although the opposite is found when relationships involving evaluations of critical role behaviors are examined.

While significant relationships are observed between counterparts' satisfaction with their advisor's enactment of his role and the PACT scores advisors give to them, similar, but nonsignificant, relationships are observed between advisors' satisfaction with their counterpart's role behavior and the PACT scores counterparts give to them. However, PACT scores counterparts give to advisors are related to their advisors' evaluation of their effectiveness in participating in making the advisor's recommended changes, the advisor's estimate of the extent to which they agreed on the desirability of making the changes, and the advisor's evaluation of their general level of military competence. Thus the PACT method, like personal observations of Korean counterparts by experienced advisors, leads to the conclusion that counterparts are sensitive to the esteem shown them.

The finding lends support to the importance that experienced advisors and trainers of prospective advisors have often attached to the development of "rapport." Rapport, in the sense of a harmonious and sympathetic relation between advisors and counterparts, does appear of considerable importance to counterparts when its importance is judged in terms of the relationship between the first counterpart Interpersonal Attraction factor and the PACT scores they give to advisors. Advisors who relate to them in a harmonious and sympathetic manner tend, on the average, to receive higher PACT scores from them. The relative absence of traits definitive of rapport from the advisors' first Interpersonal Attraction factor and the near absence of relationship between it and the PACT scores they give to counterparts suggests that rapport may be of less importance to the decision of advisors to continue working with counterparts. What appears to be of somewhat greater importance is the extent to which the advisor regards the counterpart as one who gets the job done.

Conclusions obtained by the PACT method have the advantage of being based upon conjoint treatment of independently collected responses of advisors and counterparts. Within the limitations imposed by the kinds of information collected in this study, the evidence suggests that substitution of the PACT scores and associated measures yields conclusions concerning the nature of advisor-counterpart relationships that are generally consonant with the impressions of experienced advisors. Because personal impressions of advisors concerning a number of characteristics of their interactions with counterparts are not available for comparison to what the PACT method yields, comparisons between the two approaches must be incomplete.

Finally, it is appropriate to attempt to reach a conclusion concerning the extent to which PACT scores register variations between the conditions and characteristics of advisors and counterparts that are relevant to and likely to have effects upon the degree to which the two basic objectives of the MAP are attained. The several types of validity tests performed were efforts to partially answer this broad question. It is not possible to evaluate the relevance of the PACT scores to the ultimate objectives of MAP on the basis of observed relations (see Figure 5). For reasons developed earlier in this report, data on the extent to which interactions between advisors and counterparts resulted in increased military capability and support for the presence and policies of U.S. personnel were not collected. In the absence of such data, an answer to the question concerning the relevance of PACT scores to these objectives can be based upon relations that are only argued from the data available. Therefore, the results concerning relations between the PACT scores advisors and counterparts received and their interpersonal attractiveness,

enactment of role behaviors, job-related characteristics, social interactions, and biographical characteristics should be reviewed and a decision made as to whether it is plausible to infer consequences for the attainment of MAP objectives from them.

## OPERATIONAL IMPLICATIONS

If the PACT scores are regarded as valid enough to support inferences concerning the likelihood that the two basic objectives of the Military Assistance Program in Korea are being met, and sufficiently sensitive to identify the conditions that either facilitate or hinder mission achievement, then the results of the study have certain implications.

These implications must, however, be tempered by the finding that reciprocation occurs about equally in from 65 to 76% of the cases. Although evidence indicative of an unwillingness to continue working together is observed in only about 4 to 6% of the cases, the absence of reciprocation in from 24 to 35% of the cases leaves a portion of the cases open to interpretation. Within the present samples, about 14 to 20% of the advisors who expressed an above-average level of willingness to continue working with the counterpart received a below-average expression from their counterparts. Similarly, about 10 to 16% of the counterparts who expressed an above-average (or high) level of willingness to continue working with their advisors received a below-average expression from their advisors.

The capacity of the PACT method to discriminate between these several outcomes, while not currently interpretable, thereby identifies subsamples of advisors and counterparts of a type toward which future work might most profitably be directed.

### Current Levels of Proficiency

Several sources of data converge to indicate that in the summer and fall of 1966 cohesiveness was high among both advisors and counterparts.[21] The validity of this statement is based upon the following:

(1) Observance that the distributions of PACT scores obtained from advisors and counterparts were both skewed toward maximum scores, with relatively few respondents in either group clearly rejecting one another as co-workers in the future.

(2) Examination of the relative ordering of mean Interpersonal Attraction Scores assigned to actual co-workers in comparison to each group's IASs assigned to preferred and non-preferred co-workers who were or were not members of their own ethnic group.

Advisors assigned the highest IAS to most-preferred American co-workers and counterparts assigned their highest scores to most-preferred Korean co-workers. Advisors gave only a slightly lower IAS to most-preferred Korean co-workers, while counterparts indicated only somewhat less attraction to most-preferred American co-workers than Korean co-workers. Both groups assigned third position to their current advisor or counterpart.

The mean differences between each of the three sets of ratings are small compared to the gap between those ratings and the means assigned to least-preferred

[21] Whether the level of cohesiveness varies over time and changes as a function of far-reaching political, economic, and military conditions not examined in this study are questions that are now testable by means of the PACT method. At the time of the study KMAG and ROKA were deeply and mutually involved in assembling, equipping, and training Korean forces for deployment in South Vietnam. The political, economic, and military factors giving rise to these activities and the consequences that they had and were expected to have upon future political, economic, and military factors cannot be excluded as possible determinants of the levels of cohesiveness observed.

co-workers. Both advisors and counterparts judged least-preferred co-workers of their own ethnic group to be least attractive (fifth position), with least-preferred co-workers not members of their own group in fourth position. Thus, compared to most- and least-preferred co-workers, whether of the raters' own or a different ethnic group, advisors and counterparts closely resemble one another's conceptions of preferred co-workers.

(3) Comparisons of the percentage of critical role behaviors judged by advisors and counterparts to require change. On the average, both groups judged each other as satisfactorily enacting about 75% of the critical role behaviors they were asked to rate. Both groups were observed to be very similar with regard to the percentage of critical role behaviors they felt should occur more often and less often than was typical.

The preponderance of evidence collected in this study, with the exception of the 35% of unreciprocated PACT scores, suggests that current policies and practices pertaining to the control of advisors are not inconsistent with the achievement of substantial levels of proficiency. The conclusion must be limited to that statement because it was not the objective of the research to evaluate the effectiveness of the several components by which control is exercised over MAP advisors. No information was collected on how advisors were selected and assigned to KMAG, on any preparatory training the advisor underwent prior to the assignment, or on current KMAG management policies and practices. Thus, comparisons between "selected" and "unselected" advisors with regard to the PACT scores they received, or comparisons involving preparatory training, orientation, and management policies and practices were not possible. To the extent that variation occurs within and between MAAGs, the PACT method now makes it possible to estimate the effects of such variation on the development of cohesive relations between advisors and counterparts.

With the high level of proficiency observed in KMAG and ROKA, little room for improvement appears to exist. Efforts to achieve greater control over the kind of proficiency examined in this study are, therefore, unlikely to yield results that present policies and practices do not already achieve to a great degree. Moreover, present evidence indicates that no *single* change in current practices and policies concerning the selection, training, and management of advisors is likely to have strong effects upon raising the level of cohesiveness attained. Nevertheless, the PACT method has tentatively identified a variety of characteristics and conditions that appear to affect the development of cohesive relations. Should further evidence, based upon the analyses of PACT scores from new samples of advisors and counterparts, confirm these preliminary findings, it may serve to guide efforts directed toward either the development, maintenance, or improvement of proficiency within KMAG or other MAAGs.

On the assumption that the conditions and characteristics identified in this study as factors influencing cohesiveness are replicable, implications appear to exist regarding possible efforts to ensure that subsequent advisors achieve proficiency in their relations to counterparts. The allocation of the implications to each of the several possible means by which control over proficiency may be achieved is, of necessity, arbitrary. While certain conditions that appear to have effects upon PACT scores fall within the customary jurisdiction of one component of the Program rather than another, it is recognized that the integrated use of selection, training, and management controls are likely to have synergistic effects beyond what any one of them alone might yield. The following allocations of implications therefore suggest areas where attention might profitably be directed rather than an effort to direct the means by which they are attended.

### Selecting Who Will Interact

Efforts directed toward the development of cohesive relations with counterparts by means of selecting personnel for assignment to Korea are, based upon observed relations

to PACT scores, most likely to succeed if candidates are screened for the following personal traits as defined by Korean counterparts: enthusiasm, competence, superiority, thoughtfulness, sincerity, trustworthiness, industriousness, and learnedness.

While the willingness of counterparts to continue working with advisors has been shown to depend upon their estimates of advisors' abilities to assist them, of equal importance to the decision is their impression of advisors' motivations to assist or frustrate them. Selection of candidate advisor personnel with regard to these traits does not, however, ensure that the traits will become or remain manifest in the Korean social context unless candidates are also screened for their abilities to tolerate frustration and ambiguity. Nor are those traits likely to become or remain manifest to counterparts if personnel are not screened for xenophobic reactions and their ability to monitor possible negative reactions to local living and working conditions for the inferences that counterparts are likely to draw from them.

One of the pre-conditions to being able to relate to counterparts in these ways is the motivation to acquire information about the social context in which the counterpart must live and work and the capacity to use that information to manage the interactions that occur. Candidates who tend to compartmentalize work and personal relations are, in the absence of corrective training experiences, unlikely to manifest the traits important to counterparts. Thus, candidates who are both achievement and affiliatively oriented are, all other things being equal, most likely to develop cohesive relations to counterparts. They are, almost by definition, most likely to identify disagreements and conflicts between their views and those of their counterparts and be motivated to prevent or reconcile the differences in a harmonious manner.

Finally, candidates who seek novel kinds of experiences and who are inclined to be adventurous are less likely to find the conditions of life and work in Korea unpleasantly distractive, preoccupying, and a source of interference with their productivity.

### Management of What is Interacted

Efforts directed toward the development of cohesive relations with counterparts by means of the kinds of management controls that exist within the local command are, based upon observed relations to PACT scores, most likely to succeed if they take the following into account:

First, the advisor's autonomy to define the changes that he regards as most important to make. Because of the periodic and recurrent rotation of personnel, advisors should be encouraged, to the extent consistent with other operational demands, to select those changes that can realistically be accomplished during their tour of duty. By this means, the proportion of changes being worked upon at any given time that were "inherited" from predecessors can be reduced.

Second, the assignment of duties to an advisor should take into account all factors that are likely to affect his ability to meet with his counterpart two to three times per week. Consideration should be given, when allocating duties, to such factors as the advisor's geographical location relative to that of his counterparts, the type of transportation available to him, time required to travel the distances, availability of billets for over-night trips, and the number of counterparts to be advised.

Third, advisors who will essentially be monitoring their counterpart's participation in the MAP should be encouraged to broaden the basis of their association, and attempts to integrate the tutorial or other aspects of the advisory job with monitoring functions should be encouraged. Counterparts should not be encouraged to perceive advisors as being concerned exclusively with monitoring functions.

## Training in How to Interact

Efforts directed toward the development of cohesive relations with counterparts by means of training and orientation programs are, based upon observed relations to PACT scores, most likely to succeed if candidate advisors are provided opportunities to become familiar with two very general characteristics of the assignment.

First, (a) the kinds of advisory role behaviors which counterparts regard as important and which, in their judgment, should occur more or less often than was typical of advisors in 1966, (b) the kinds of advisory role behaviors which counterparts regard as important and which, in their judgment, were occurring about as often in 1966 as they thought they should; (c) the kinds of counterpart role behaviors which advisors regarded as important and which, in their judgment, should have occurred more or less often than was typical of counterparts in 1966, (d) the kinds of counterpart role behaviors which advisors regarded as important and which, in their judgment, were occurring about as often in 1966 as they thought they should; (e) the similarities between advisors' and counterparts' role expectations as well as (f) the differences between them and the potential conflicts and disagreements inherent in the advisor-counterpart relationship. The construction of training materials designed to aid prospective advisors in the management of "potential discontents" would seem a useful contribution to the MAP.

Second, candidate advisors should be trained and neophyte advisors oriented, upon arrival at their duty station, toward adopting attitudes and patterns of behaviors that will permit them to participate in social interactions with counterparts in ways that encourage development of cohesiveness. Constructing training and orientation materials to familiarize and desensitize advisors to elements of local living conditions to which they are likely to react negatively in the presence of counterparts should promote attainment of MAP objectives.

Phobic reactions to local foods, beverages, and sanitation should be explicitly treated as should matters pertaining to theft and espionage. The objective of the training should not be to discourage social interactions with counterparts, but to train advisors to become better informed and discriminating in the choices they make, and to provide to advisors a realistic, empirically based station report concerning these matters. Simultaneously, the training should guide them toward achieving adjustments to local conditions that minimize risks without maximizing alienation from the local conditions and the world in which the counterparts, upon whom they depend for progress, must live.

Training and orientation programs that deal with these topics must, in order to develop in advisors a realistic, balanced, and fair perspective, present the information in comparative form. That is, every effort must be made to avoid giving personnel who have never been to Korea, and who know only of the primitive and inhospitable conditions that existed during the time of the Korean war, the impression that Korea is, today, much the same. That is, every effort must be made to avoid creating the impression that one's personal welfare is quantitatively more in jeopardy in Korea than in the United States or other countries. There are both similarities and differences in the risks that exist. Although prospective advisor personnel have been reared to cope effectively with the risks that exist in the United States, they have not in general been taught how to cope with the risks in Korea. No training or orientation program will be complete nor as effective as is desirable if the concept of kibun is not made understandable to personnel who seek to establish cohesive relations to counterparts.

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# APPENDICES

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## Appendix A

## MEASURE OF POSITION POWER[a,b]

1. Compliments from the leader are appreciated more than compliments from other group members.
2. Compliments are highly valued, criticisms are considered damaging.
3. Leader can recommend punishments and rewards.
4. Leader can punish or reward members on his own accord.
5. Leader can effect (or can recommend) promotion or demotion.
6. Leader chairs or coordinates group but may or may not have other advantages, i.e., is appointed or acknowledged chairman or leader.
7. Leader's opinion is accorded considerable respect and attention.
8. Leader's special knowledge or information (and members' lack of it) permits leader to decide how task is to be done or how group is to proceed.
9. Leader cues members or instructs them on what to do.
10. Leader tells or directs members what to do or what to say.
11. Leader is expected to motivate group.
12. Leader is expected to suggest and evaluate the members' work.
13. Leader has superior or special knowledge about the job, or has special instructions but requires members to do job.
14. Leader can supervise each member's job and evaluate it or correct it.
15. Leader knows his own as well as member's job and could finish the work himself if necessary, e.g., writing a report for which all information is available.
16. Leader enjoys special or official rank and status in real life which sets him apart from or above group members, e.g., military rank or elected office in a company or organization. (+5 points)
17. Leader is given special or official rank by experimenter to simulate for role-playing purposes, e.g., "You are a general" or "the manager." This simulated rank must be clearly superior to members' rank and must not be just that of "chairman" or "group leader" of the group during its work period. (+3 points)
18. Leader's position is dependent on members; members can replace or dispose leader. (−5 points)

[a]Reproduced from F.E. Fiedler. *A Theory of Leadership Effectiveness*, (4), p. 24, with the permission of the McGraw-Hill Book Company.

[b]The dimension of leader position is defined by the above checklist in which all "true" items are given one point, except for items 16, 17, and 18, which are weighted +5, +3, and −5 points respectively.

## Appendix B

# ADVISOR AND COUNTERPART PACT FORMS AND SCORING KEYS

### Advisor Form

1. If I met my present counterpart's superior officer, I would find it difficult to say anything good about my counterpart.

   Agree [ ] [X] Disagree

2. If my present counterpart had a choice, I would prefer that he choose to work with a different advisor.

   Agree [ ] [X] Disagree

3. If a good friend had a choice of assignments, I would not recommend my assignment if he would have to work with my present counterpart.

   Agree [ ] [X] Disagree

4. If I thought that a frank discussion with his ROKA superiors would enable me to get rid of my present counterpart, I would do it.

   Agree [ ] [X] Disagree

5. I would like my present counterpart to remain in his present assignment so that I can continue to work with him.

   Agree [X] [ ] Disagree

6. If I ever return to Korea for another tour of duty, I hope to be able to work with my present counterpart again.

   Agree [X] [ ] Disagree

7. If I ever return to Korea for another tour of duty in KMAG, I hope that I would *not* have to work with my present counterpart again.

   Agree [ ] [X] Disagree

8. If my present counterpart had a choice between continuing to work with me and changing to work with a different advisor in KMAG, I would prefer that he continue to work with me.

   Agree [X] [ ] Disagree

9. If I met my present counterpart's superior officer, I would try to give him the impression that my counterpart is being very helpful.

Agree [X] [ ] Disagree

10. If my present counterpart is not rotated soon to a different position, I will be unhappy about continuing to work with him.

Agree [ ] [X] Disagree

11. The counterpart with whom I now work has made significant contributions to strengthening and improving ROKA.

Agree [X] [ ] Disagree

12. ROKA has not benefited from any of the work of my present counterpart.

Agree [ ] [X] Disagree

13. My present counterpart has tried very hard to find ways of improving ROKA.

Agree [X] [ ] Disagree

14. My present counterpart seems to be genuinely interested in co-operating with KMAG.

Agree [X] [ ] Disagree

15. If all ROKA counterparts were like my present counterpart, the Military Assistance Program would be much more helpful to the United States.

Agree [X] [ ] Disagree

16. If I return to Korea in the future as a KMAG advisor, I would expect to be working with a counterpart who is much better than my present counterpart.

Agree [ ] [X] Disagree

17. I would *not* inconvenience myself to continue working with my present counterpart.

Agree [ ] [X] Disagree

18. I hope that I never have to work with another counterpart who is like the one with whom I now work.

Agree [ ] [X] Disagree



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19. I will feel very relieved if my present counterpart is transferred to a position to which I will not serve as an advisor.

Agree [ ] [X] Disagree

20. I have met some counterparts with whom I thought I would much more prefer to work than my present counterpart.

Agree [ ] [X] Disagree

## Counterpart Form

1. If I met my present advisor's superior officer, I would find it difficult to say anything good about my advisor.

Agree [ ] [X] Disagree

2. If my present advisor had a choice between continuing to work with me and changing to work with a different counterpart in ROKA, I would prefer that he continue to work with me.

Agree [X] [ ] Disagree

3. If a good friend had a choice of assignments, I would not recommend my assignment if he would have to work with my present advisor.

Agree [ ] [X] Disagree

4. If I thought that a frank discussion with his U.S. Army superiors would enable me to get rid of my present advisor, I would do it.

Agree [ ] [X] Disagree

5. I would like my present advisor to extend his tour in Korea so that I could continue to work with him.

Agree [X] [ ] Disagree

6. If my present advisor ever returns to Korea for another tour of duty, I hope to have him as my advisor again.

Agree [X] [ ] Disagree

7. If my present advisor ever returns to Korea for another tour of duty, I hope he would *not* be my advisor again.

Agree [ ] [X] Disagree

8. If I were going to be reassigned and thought that my present advisor was competent to advise me in my new assignment, I would like to have him reassigned so that he would continue to work with me.

Agree [X] [ ] Disagree

9. If I met my present advisor's superior officer, I would try to give him the impression that my present advisor is being very helpful.

Agree [X] [ ] Disagree



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10. If my present advisor's tour in Korea was extended for some reason, I would be unhappy about continuing to work with him.

Agree [ ] [X] Disagree

11. The advisor with whom I now work has made significant contributions to strengthening and improving ROKA.

Agree [X] [ ] Disagree

12. ROKA has *not* benefited from any of the work of my present advisor.

Agree [ ] [X] Disagree

13. My present advisor has tried very hard to find ways of improving ROKA.

Agree [X] [ ] Disagree

14. My present advisor seems to be genuinely interested in giving assistance to ROKA.

Agree [X] [ ] Disagree

15. If all KMAG advisors were like my present advisor, the Military Assistance Program would be much more helpful to ROKA.

Agree [X] [ ] Disagree

16. I have had advisors in the past who were much better than the advisor with whom I currently work.

Agree [ ] [X] Disagree

17. The advisor with whom I now work is the worst advisor I have ever had.

Agree [ ] [X] Disagree

18. The advisor with whom I now work is the best advisor I have ever had.

Agree [X] [ ] Disagree

19. ROKA would be better off if my present advisor were not in KMAG.

Agree [ ] [X] Disagree

20. My present advisor has shown a strong desire to understand conditions in ROKA.

Agree [X] [ ] Disagree

## Appendix C

# PACT SCORE FREQUENCY DISTRIBUTIONS

| PACT Score | Paired Samples | | | | Paired Plus Unpaired Samples | | | |
|---|---|---|---|---|---|---|---|---|
| | Advisors ($N$ = 51) | | Counterparts ($N$ = 51) | | Advisors ($N$ = 108) | | Counterparts ($N$ = 97) | |
| | $f$ | Percent | $f$ | Percent | $f$ | Percent | $f$ | Percent |
| 20 | 25 | 49 | 14 | 27 | 56 | 52 | 19 | 20 |
| 19 | 10 | 20 | 6 | 12 | 18 | 17 | 13 | 13 |
| 18 | 4 | 8 | 9 | 18 | 10 | 9 | 15 | 15 |
| 17 | 3 | 6 | 9 | 18 | 4 | 4 | 12 | 12 |
| 16 | 2 | 4 | 4 | 8 | 3 | 3 | 8 | 8 |
| 15 | 0 | | 0 | | 1 | 1 | 0 | |
| 14 | 0 | | 0 | | 0 | | 2 | 2 |
| 13 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 |
| 12 | 1 | 2 | 1 | 2 | 2 | 2 | 3 | 3 |
| 11 | 0 | | 0 | | 3 | 3 | 1 | 1 |
| 10 | 1 | 2 | 1 | 2 | 1 | 1 | 2 | 2 |
| 9 | 0 | | 0 | | 1 | 1 | 0 | |
| 8 | 0 | | 1 | 2 | 0 | | 2 | 2 |
| 7 | 0 | | 0 | | 0 | | 1 | 1 |
| 6 | 2 | 4 | 0 | | 3 | 3 | 1 | 1 |
| 5 | 0 | | 1 | 2 | 1 | 1 | 3 | 3 |
| 4 | 0 | | 0 | | 2 | 2 | 1 | 1 |
| 3 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 1 |
| 2 | 0 | | 2 | 4 | 0 | | 5 | 5 |
| 1 | 1 | 2 | 0 | | 1 | 1 | 1 | 1 |
| 0 | 0 | | 1 | 2 | 0 | | 5 | 5 |
| Mean | 17.5 | | 16.2 | | 17.6 | | 14.6 | |
| Standard Deviation | 3.9 | | 5.3 | | 4.5 | | 6.4 | |

## Appendix D

# PACT SCORES: ROTATED FACTOR LOADINGS, MEANS, STANDARD DEVIATIONS, AND COMMUNALITIES

Counterparts' Form
($N = 51$)

| Item No. | Factors | | | | | Mean (percent) | SD (percent) | $h^2$ |
|---|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | | | |
| 1 | .39 | .13 | .28 | .61 | .38 | 84 | 37 | .76 |
| 2 | .54 | .16 | .35 | .49 | .28 | 84 | 37 | .76 |
| 3 | .01 | .07 | .11 | .11 | .93 | 69 | 47 | .89 |
| 4 | .21 | .06 | .38 | .76 | −.02 | 90 | 30 | .78 |
| 5 | .57 | .30 | .55 | .08 | .08 | 75 | 44 | .73 |
| 6 | .36 | .15 | .82 | .31 | .06 | 86 | 35 | .92 |
| 7 | .36 | .15 | .82 | .31 | .06 | 86 | 35 | .92 |
| 8 | .06 | .15 | .71 | .17 | .09 | 82 | 38 | .57 |
| 9 | .45 | .13 | .18 | .72 | −.00 | 92 | 27 | .77 |
| 10 | .47 | .12 | .26 | .60 | .24 | 84 | 37 | .72 |
| 11 | .68 | .10 | .43 | .27 | .16 | 80 | 40 | .76 |
| 12 | .28 | .08 | .61 | .63 | .23 | 90 | 30 | .91 |
| 13 | .71 | .05 | .47 | .31 | .19 | 82 | 38 | .85 |
| 14 | .79 | .23 | .17 | .26 | −.17 | 88 | 33 | .79 |
| 15 | .36 | .15 | .82 | .31 | .06 | 86 | 35 | .92 |
| 16 | .07 | .93 | .18 | .21 | −.05 | 49 | 50 | .94 |
| 17 | .51 | .03 | .01 | .61 | .15 | 90 | 30 | .65 |
| 18 | .22 | .90 | .21 | .03 | .18 | 49 | 50 | .94 |
| 19 | −.09 | .15 | .50 | .72 | −.03 | 88 | 33 | .79 |
| 20 | .86 | .04 | .18 | .18 | .00 | 86 | 35 | .80 |

Advisors' Form
($N = 51$)

| Item No. | Factors | | | | | Mean (percent) | SD (percent) | $h^2$ |
|---|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | | | |
| 1 | .65 | .30 | −.31 | .47 | −.21 | 98 | 14 | .88 |
| 2 | .74 | .40 | .45 | .05 | .18 | 92 | 27 | .94 |
| 3 | .81 | .07 | .21 | .44 | .03 | 96 | 20 | .90 |
| 4 | .94 | .23 | .11 | .02 | .21 | 94 | 24 | .98 |
| 5 | .57 | .61 | .44 | .12 | .11 | 90 | 30 | .92 |

*(Continued)*

Advisors' Form *(Continued)*
($N = 51$)

| Item No. | Factors | | | | | Mean (percent) | SD (percent) | $h^2$ |
|---|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | | | |
| 6 | .30 | .69 | .23 | .03 | .39 | 82 | 38 | .78 |
| 7 | .94 | .23 | .11 | .02 | .21 | 94 | 24 | .98 |
| 8 | .40 | .53 | .54 | .43 | −.05 | 92 | 27 | .93 |
| 9 | .24 | .80 | .08 | .05 | .08 | 88 | 33 | .71 |
| 10 | .94 | .23 | .11 | .02 | .21 | 94 | 24 | .98 |
| 11 | .30 | .29 | .09 | .20 | .69 | 78 | 42 | .70 |
| 12 | .23 | .14 | .92 | .15 | .17 | 96 | 20 | .96 |
| 13 | .11 | .60 | .25 | .52 | .28 | 84 | 37 | .79 |
| 14 | .37 | .73 | .27 | .13 | .38 | 86 | 35 | .90 |
| 15 | .23 | .73 | .14 | .19 | .43 | 80 | 40 | .83 |
| 16 | .14 | .79 | −.04 | .13 | .13 | 84 | 37 | .68 |
| 17 | .02 | .13 | .15 | .78 | .35 | 70 | 47 | .77 |
| 18 | .94 | .23 | .11 | .02 | .21 | 94 | 24 | .98 |
| 19 | .74 | .40 | .45 | .05 | .18 | 92 | 27 | .94 |
| 20 | .20 | .33 | .11 | .18 | .67 | 71 | 46 | .64 |

## Appendix E

# PACT SCORES: INDICES OF FACTORIAL SIMILARITY

| Advisor Factors | Counterpart Factors | | | | |
|---|---|---|---|---|---|
| | I | II | III | IV | V |
| I | .60 | .58 | .73 | .74 | .59 |
| II | .77 | .65 | .80 | .71 | .24 |
| III | .51 | .32 | .71 | .58 | .35 |
| IV | .61 | .28 | .48 | .58 | .61 |
| V | .83 | .39 | .65 | .57 | .20 |

## Appendix F

# INTERPERSONAL ATTRACTION SCORES: ROTATED FACTOR LOADINGS, MEANS, STANDARD DEVIATIONS, AND COMMUNALITIES

| Counterparts' Ratings of Advisors ($N = 45$) | | | | | | |
|---|---|---|---|---|---|---|
| Trait Scales | Factors | | | Mean | SD | $h^2$ |
| | I | II | III | | | |
| pleasant-unpleasant | .62 | .35 | .49 | 6.1 | 1.0 | .75 |
| patient-impatient | .64 | .26 | −.01 | 5.5 | 1.6 | .47 |
| adaptable-unadaptable | .61 | .22 | .46 | 5.7 | 1.2 | .64 |
| enthusiastic-unenthusiastic | .82 | .16 | .31 | 6.1 | 1.2 | .79 |
| organized-unorganized | .60 | −.16 | .46 | 5.6 | 1.4 | .60 |
| polite-rude | .50 | .52 | .30 | 6.1 | 1.0 | .61 |
| fair-unfair | .50 | .25 | .40 | 6.0 | 1.2 | .48 |
| thoughtful-rash | .76 | .19 | .33 | 5.9 | 1.4 | .72 |
| agreeable-stubborn | .12 | .73 | .04 | 4.8 | 1.9 | .55 |
| kind-unkind | .50 | .57 | .43 | 6.2 | 1.2 | .76 |
| leader-follower | .29 | −.21 | .65 | 4.6 | 1.6 | .54 |
| economical-wasteful | .28 | −.11 | .40 | 6.2 | .9 | .25 |
| learned-ignorant | .71 | .24 | .51 | 5.9 | 1.1 | .82 |
| generous-stingy | .33 | .12 | .57 | 4.2 | 1.7 | .46 |
| sympathetic-unsympathetic | .23 | .45 | .56 | 5.5 | 1.5 | .57 |
| lucky-unlucky | .09 | .13 | .80 | 5.0 | 1.1 | .66 |
| industrious-lazy | .68 | .23 | .27 | 6.0 | 1.2 | .60 |
| considerate-inconsiderate | .50 | .29 | .51 | 5.8 | 1.2 | .59 |
| superior-inferior | .80 | .22 | .37 | 6.0 | 1.3 | .83 |
| harmonious-quarrelsome | .14 | .63 | −.07 | 5.8 | 1.4 | .42 |
| valuable-worthless | .68 | .03 | .57 | 5.8 | 1.2 | .80 |
| friendly-unfriendly | .65 | .48 | −.02 | 6.0 | 1.3 | .65 |
| competent-incompetent | .81 | .16 | .39 | 6.0 | 1.3 | .84 |
| content-envious | .32 | .53 | .52 | 5.8 | 1.3 | .65 |
| respectful-disrespectful | .38 | .49 | .53 | 5.9 | 1.2 | .67 |
| tolerant-intolerant | .55 | .38 | .54 | 5.6 | 1.3 | .74 |
| likeable-unlikeable | .72 | .34 | .31 | 5.9 | 1.3 | .73 |
| productive-unproductive | .58 | .06 | .57 | 5.7 | 1.1 | .68 |
| consistent-erratic | .71 | .25 | .27 | 6.0 | 1.2 | .64 |
| sincere-insincere | .76 | .32 | .38 | 6.2 | 1.2 | .82 |
| civilized-uncivilized | .68 | .18 | .58 | 6.0 | 1.1 | .84 |
| modest-arrogant | .70 | .49 | .26 | 5.9 | 1.3 | .80 |
| trustworthy-untrustworthy | .83 | .26 | .34 | 5.9 | 1.3 | .87 |

*(Continued)*

Counterparts' Ratings of Advisors *(Continued)*
($N = 45$)

| Trait Scales | Factors | | | Mean | SD | $h^2$ |
|---|---|---|---|---|---|---|
| | I | II | III | | | |
| powerful-powerless | .26 | .37 | .66 | 5.2 | 1.4 | .64 |
| rational-irrational | .64 | .38 | .44 | 5.9 | .9 | .75 |
| humble-boastful | .48 | .46 | .33 | 5.7 | 1.3 | .55 |
| forgiving-revengeful | .21 | .51 | .67 | 5.4 | 1.3 | .76 |
| wise-foolish | .55 | .33 | .51 | 5.7 | 1.2 | .67 |
| Total Rotated Variance | 12.47 | 4.86 | 7.83 | | | 25.21 |
| Percent Total Common Rotated Variance | 49.5 | 19.3 | 31.1 | | | |

Advisors' Ratings of Counterparts
($N = 48$)

| Trait Scales | Factors | | | Mean | SD | $h^2$ |
|---|---|---|---|---|---|---|
| | I | II | III | | | |
| pleasant-unpleasant | .29 | .84 | .12 | 6.5 | .8 | .80 |
| patient-impatient | −.02 | .62 | .24 | 5.6 | 1.3 | .44 |
| adaptable-unadaptable | .74 | .34 | .15 | 5.9 | 1.0 | .69 |
| enthusiastic-unenthusiastic | .72 | .39 | .09 | 5.7 | 1.3 | .68 |
| organized-unorganized | .70 | .22 | .25 | 5.8 | 1.2 | .60 |
| polite-rude | .17 | .78 | −.09 | 6.6 | .6 | .65 |
| fair-unfair | .41 | .34 | .53 | 6.1 | 1.1 | .57 |
| thoughtful-rash | .62 | .30 | .29 | 6.0 | 1.0 | .55 |
| agreeable-stubborn | .26 | .41 | .46 | 5.5 | 1.3 | .44 |
| kind-unkind | .44 | .50 | .42 | 5.7 | 1.3 | .62 |
| leader-follower | .71 | −.01 | .20 | 5.9 | 1.2 | .55 |
| economical-wasteful | .38 | .61 | .52 | 5.6 | 1.2 | .79 |
| learned-ignorant | .62 | .40 | .16 | 6.1 | .8 | .57 |
| generous-stingy | .38 | .51 | .40 | 5.4 | 1.1 | .56 |
| sympathetic-unsympathetic | .34 | .15 | .72 | 5.7 | .9 | .65 |
| lucky-unlucky | −.04 | .20 | .46 | 4.7 | 1.0 | .26 |
| industrious-lazy | .80 | .13 | .06 | 6.2 | 1.1 | .67 |
| considerate-inconsiderate | .50 | .19 | .55 | 6.0 | 1.0 | .59 |
| superior-inferior | .74 | .02 | .15 | 5.9 | 1.0 | .58 |
| harmonious-quarrelsome | .47 | .44 | .60 | 5.8 | 1.2 | .77 |
| valuable-worthless | .83 | .18 | .27 | 6.2 | .9 | .79 |
| friendly-unfriendly | .45 | .44 | .44 | 6.7 | 1.0 | .60 |
| competent-incompetent | .82 | .02 | .22 | 6.3 | 1.0 | .73 |
| content-envious | .12 | .47 | .37 | 5.1 | 1.3 | .37 |
| respectful-disrespectful | .43 | .53 | .34 | 6.2 | .8 | .58 |
| tolerant-intolerant | .39 | .33 | .55 | 5.7 | 1.2 | .57 |
| likeable-unlikeable | .50 | .54 | .36 | 6.4 | .8 | .68 |
| productive-unproductive | .87 | .15 | .23 | 6.2 | .8 | .83 |

*(Continued)*

Advisors' Ratings of Counterparts *(Continued)*
($N$ = 48)

| Trait Scales | Factors | | | Mean | SD | $h^2$ |
|---|---|---|---|---|---|---|
| | I | II | III | | | |
| consistent-erratic | .57 | .32 | .30 | 5.9 | 1.2 | .51 |
| sincere-insincere | .59 | .46 | .17 | 6.3 | .9 | .59 |
| civilized-uncivilized | .28 | .21 | .65 | 6.3 | .9 | .54 |
| modest-arrogant | .15 | .56 | .48 | 5.4 | 1.3 | .57 |
| trustworthy-untrustworthy | .52 | .39 | .42 | 6.1 | 1.2 | .61 |
| powerful-powerless | .34 | −.14 | .58 | 5.4 | 1.0 | .47 |
| rational-irrational | .43 | .12 | .35 | 6.0 | 1.1 | .32 |
| humble-boastful | −.01 | .59 | .46 | 5.0 | 1.4 | .56 |
| forgiving-revengeful | .12 | .23 | .70 | 5.1 | 1.1 | .55 |
| wise-foolish | .66 | .18 | .60 | 5.8 | 1.0 | .83 |
| Total Rotated Variance | 10.15 | 6.18 | 6.36 | | | 22.73 |
| Percent Total Common Rotated Variance | 44.7 | 27.2 | 28.0 | | | 99.9 |

# Distribution List

1 CDR TNG COMMAND US PACIFIC FLT SAN DIEGO
1 DIR PERS RES DIV BUR OF NAV PERS
1 TECH LIB BUR OF SHIPS CODE 210L NAVY DEPT
1 HUMAN FACTORS BR PSYCHOL RES DIV ONR
1 CO FLT ANTI-AIR WARFARE TNG SAN DIEGO
1 CO NUCLEAR WEAPONS TNG CTR PACIFIC U S NAV AIR STA SAN DIEGO
2 CO FLT TNG CTR NORFOLK
1 CO FLEET TNG CTR U S NAV STA SAN DIEGO
1 PRES NAV WAR COLL NEWPORT ATTN MAHAN LIB
1 CO FLT ANTI-SUB WARFARE SCH SAN DIEGO
1 CHF OF NAV RES ATTN SPEC ASST FOR R & D
1 CHF OF NAV RES ATTN HEAD PERS + TNG BR CODE 458
1 CHF OF NAV RES ATTN DIR PSYCHOL SCI DIV CODE 450
1 CHF OF NAV RES ATTN HEAD GP PSYCHOL BR CODE 452
1 DIR US NAV RES LAB ATTN CODE 5120
1 DIR NAVAL RSCH ATTN LIB CODE 2029 (ONRL) WASH DC
1 CHF OF NAV AIR TNG TNG RES DEPT NAV AIR STA PENSACOLA
1 CO MED FLD RES LAB CAMP LEJEUNE
1 DIR AEROSPACE CREW EQUIP LAB NAV AIR ENGNR CTR PA
1 COMDT MARINE CORPS HQ MARINE CORPS ATTN CODE AO-1B
1 HQ MARINE CORPS ATTN AX
1 DIR MARINE CORPS INST ATTN EVAL UNIT
1 CG(G5) III MARINE AMPHIBIOUS FORCE MAC FPO SAN FRAN 96602
1 CHF OF NAV AIR TECH TNG NAV AIR STA MEMPHIS
1 DIR OPS EVAL GRP OFF OF CHF OF NAV OPS OPO3EG
2 COMDT PIP COAST GUARD HQ
1 CO US COAST GUARD TNG CTR GOVERNORS ISLAND NY
1 CO US COAST GUARD TNG CTR CAPE MAY NJ
1 CO US COAST GUARD TNG CTR & SUP CTR ALAMEDA CALIF
1 CO US COAST GUARD INST OKLA CITY OKLA
1 CO US COAST GUARD RES TNG CTR YORKTOWN VA
1 SUPT US COAST GUARD ACAD NEW LONDON CONN
1 OPNS ANLS OFC HQ STRATEGIC AIR COMD OFFUTT AFB
1 TECH DIR TECH TNG DIV(MRD) AFHRL LOWRY AFB COLO
1 CHF SCI DIV DRCTE SCI + TECH DCS R+D HQ AIR FORCE AFRSTA
1 FAA DRCTE OF PLNS & OPS HQ USAF WASH DC
2 HQ AFSC SCBB ANDREWS AFB
2 CDR ELEC SYS DIV L G HANSCOM FLD ATTN ESRMA BEDFORD MASS
1 HQ SAMSO (SMSIR) AF UNIT POST OFC LA AFS CALIF
2 AFHRL (HRT) WRIGHT-PATTERSON AFB
1 AMD AMRH BROOK AFB TEXAS
1 CDR ELEC SYS DIV LG HANSCOM FLD ATTN ESTI
1 DIR AIR U LIB MAXWELL AFB ATTN AULSI-63-253
1 DIR OF LIB US AIR FORCE ACAD
1 COMDT DEF WPNS SYS MGT CTR AF INST OF TECH WRIGHT-PATTERSON AFB
1 COMDT ATTN LIB DEF WPNS SYS MGT CTR AF INST OF TECH WRIGHT-PAT.
1 6570TH PERS RES LAB PRA-4 AEROSPACE MED DIV LACKLAND AFB
2 AF HUMAN RESOURCES LAB AMHTO WRIGHT-PATTERSON AFB
2 CO HUMAN RESOURCES LAB BROOKS AFB
1 PSYCHOBIOLOGY PROG NATL SCI FOUND
1 DIR NATL SCI FOUNDN WASHINGTON ATTN ASST DIR FOR SOC SCI
1 DIR NATL SECUR AGY FT GEO G MEADE ATTN TDL
5 CIA ATTN OCR/ADD STANDARD DIST
1 SYS EVAL DIV RES DIRECTORATE DDD-OCD PENTAGON
1 DEPT OF STATE BUR OF INTEL + RES EXTERNAL RES STAFF
9 US INFO AGY IRI L PROCUREMENT LIB
1 SCI INFO EXCH WASHINGTON
2 CHF MGT & GEN TOG DIV TR 200 P&A WASH DC
1 BUR OF RES & ENGR US POST OFC DEPT ATTN CHF HUMAN FACTORS BR
1 EDUC MEDIA BR OE DEPT OF HEW ATTN T D CLEMENS
1 OFC OF INTERNATL TNG PLANNING & EVAL BR AID WASH DC
1 DEPT OF TRANS P&A ACQ SEC HQ 6100A WASH DC
2 SYS DEVEL CORP SANTA MONICA ATTN LIB
1 DUNLAP + ASSOC INC DARIEN ATTN LIB
2 RAC ATTN LIB MCLEAN VA
1 DIR RAND CORP SANTA MONICA ATTN LIB
1 GP EFFECTIVENESS RSCH LAB U OF ILL DEPT OF PSYCHOL
4 MITRE CORP BEDFORD MASS ATTN LIB
2 U OF PGH LEARNING R+D CTR ATTN DIR
1 HUMAN SCI RES INC MCLEAN VA
2 TECH INFO CTR BATTELLE MEM INST 505 KING AVN COLUMBUS O
1 LOCKHEED CORP MSL DIV DETROIT ATTN TECH INFO CTR
5 CTR PGH RES IN SOCIAL SYS AMER U ATTN LIBN
1 EDUC & TNG CONSULTANTS ATTN L C SILVERN LA
1 GEN DYNAMICS POMONA DIV ATTN LIB DIV CALIF
2 MARQUARDT ENGRG PROD CO CUCAMONGA CALIF
1 MGR AUTOTECHNOLOGY AEROSPACE SYS DIV MS 88-20 BOEING CO SEATTLE
2 CTR PGH RES IN SOCIAL SYS PLD OFC FT BRAGG
1 IDA RSCH & DNG SUPT DIV ARL VA
1 HUGHES AIRCRAFT COMPANY CULVER CITY CALIF
2 BATTELLE MEMORIAL INST COLUMBUS LABS ATTN RACIC D
1 EDU CTR PSD RES DR (LEARNING) + TEACHING U OF MICH
1 O M STURGILL OHIO STATE UNIV

1 EDITOR TNG RES ABSTR AMER SOC OF TNG DIRS U OF TENN
1 U OF CHICAGO DEPT OF SOC
1 CTR FOR RES IN SOCIAL SYS AMER U
3 BRITISH EMBSY BRITISH DEF RES STAFF WASHINGTON
3 ACS FOR INTEL FOREIGN LIAISON OFCR TO NORWEG MILIT ATTACHE
1 ARMY ATTACHE ROYAL SWEDISH EMBSY WASHINGTON
1 DEF RES MED LAB ONTARIO
3 AUSTRALIAN NAV ATTACHE EMBSY OF AUSTRALIA WASH DC
1 FRENCH LIAISON OFCR ARMY AVN TEST BD FT RUCKER
2 AUSTRALIAN EMBSY OFC OF MILIT ATTACHE WASHINGTON
1 MENNINGER FOUNDATION TOPEKA
2 AMER INST FOR RES SILVER SPRING
1 AMER INST FOR RES PGH ATTN LIBN
1 DIR PRIMATE LAB UNIV OF WIS MADISON
3 MATRIX CORP ALEXANDRIA ATTN TECH LIBN
1 AMER TEL+TEL CO NY
1 U OF GEORGIA DEPT OF PSYCHOL
1 OBERLIN COLL DEPT OF PSYCHOL
1 DR GEORGE T HAUTY CHMN DEPT OF PSYCHOL U OF DEL
1 HEAD DEPT OF PSYCHOL UNIV OF SC COLUMBIA
1 U OF GEORGIA DEPT OF PSYCHOL
1 U OF UTAH DEPT OF PSYCHOL
1 GE CO WASH D C
1 AMER INST FOR RES PALO ALTO CALIF
1 N MEX STATE U ATTN PROF OF PSYCHOL
1 ROWLAND + CO HADDONFIELD NJ ATTN PRES
1 OHIO STATE U SCH OF AVN
1 AIRCRAFT ARMAMENTS INC COCKEYSVILLE MD
1 AMER PSYCHOL ASSOC WASHINGTON ATTN PSYCHOL ABSTR
1 NO ILL U HEAD DEPT OF PSYCHOL
1 GEORGIA INST OF TECH DIR SCH OF PSYCHOL
1 AMER BEHAV SCI CALIF
1 SAN DIEGO STATE COLL PUBLIC ADMIN CTR
1 COLL OF WM + MARY SCH OF EDUC
1 SO ILLINOIS U DEPT OF PSYCHOL
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1 DR L Y RADER CHMN DEPT OF ELEC ENGNR U OF VA
1 CHF PROCESSING DIV DUKE U LIB
1 U OF CALIF GEN LIB DOCU DEPT
1 PSYCHOL LIB HARVARD UNIV CAMBRIDGE
1 U OF ILL LIB SER DEPT
2 U OF KANSAS LIB PERIODICAL DEPT
1 U OF NEBRASKA LIBS ACQ DEPT
1 OHIO STATE U LIBS GIFT + EXCH DIV
1 PENNA STATE U PATTEE LIB DOCU DESK
1 PURDUE U LIBS PERIODICALS CHECKING FILES
1 STANFORD U LIBS DOCU LIB
1 LIBN U OF TEXAS
1 SYRACUSE U LIB SER DIV
1 SERIALS REC UNIV OF MINN MINNEAPOLIS
1 STATE U OF IOWA LIBS SER ACQ
1 NO CAROLINA STATE COLL DH HILL LIB
2 BOSTON U LIBS ACQ DIV
1 U OF MICH LIBS SER DIV
1 BROWN U LIB
2 COLUMBIA U LIBS DOCU ACQ
1 DIR JOINT U LIBS NASHVILLE
1 U OF DENVER MARY REED LIB
2 LIB GOD wash UNIV ATTN SPEC COLL DEPT wash DC
2 LIB OF CONGRESS CHF OF EXCH + GIFT DIV
1 U OF PGH DOCU LIBN
1 CATHOLIC U LIB EDUC & PSYCHOL LIB wash DC
1 U OF KY MARGARET I KING LIB
1 IND U ATTN LIBN SER DEPT
1 KANSAS STATE U FARRELL LIB
1 BRIGHAM YOUNG U LIB SER SECT
1 U OF CALIFORNIA LIB DAVIS CAMPUS

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